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HERTFORDSHIRE COUNTY COUNCIL.

THIRTY-FIFTH ANNUAL REPORT ON THE

PUBLIC HEALTH

OF

HERTFORDSHIRE

BEING THAT FOR THE YEAR

1933

BY

H. HYSLOP THOMSON

M.D., D.P.H.

County Medical Officer of Health.

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**To the Chairman and Members of
the Public Health and Housing Committee.**

LADIES AND GENTLEMEN,

I have the honour of presenting to you the Annual Report on the Public Health of the County during the year 1933, being the thirty-fifth you have received. It includes the reports on Tuberculosis and Mental Deficiency which were previously issued in separate form.

The statistics for the year indicate that the general standard of health in the County during 1933 has been, on the whole, satisfactory, although the general death-rate is slightly higher, chiefly due to a higher death-rate from influenza and epidemic disease. It is satisfactory to note that infant mortality has fallen and has reached the low figure of 42, and that there is a further decrease in the death-rate from malignant disease.

I am, Ladies and Gentlemen,

Your obedient servant,

H. HYSLOP THOMSON,

County Medical Officer of Health.

HERTFORD.

Members of the Public Health and Housing Committee.

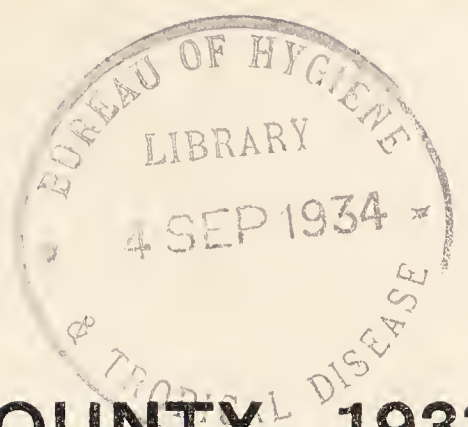
Chairman : H. E. Fern.

Anderson, H.	Goddard, S. J.
Attenborough, Mrs. G. E.	*Goulding, A.
Ball, C. F., C.B.E.	Grimwood, T. R.
Barratt, S. G. R.	Halsey, C. H.
Bartleet, A. R.	Hart, W. B.
*Blount, Miss M. B.	Hargreaves, A. A.
*Bradford, Miss E. E. R.	Haslam, R. H., Capt.
Bridger, H. J.	Lindgren, G. S.
Bromet, A.	Lucas, Major-Gen. C. H. Tindall,
Brown, J. W.	C.B., C.M.G., D.S.O.
Bushby, G. H.	Mitchell, P. G.
Cannon, H.	Ordish, G. H.
Clark, T. R.	Rutherford, D. C.
Curtis, H. E.	*Smith, Rev. Roland.
*Dockray, Dr. J. S.	Slade, E. H.
*Fern, H. E. (Chairman).	*Stacey, W.
Fletcher, H.	Vialou, A. B.
Fordham, Mrs. P.	Wallace, A.
Franklin, E. J.	

Those marked * are members of the Sub-Committee as to County Medical Officer of Health's Reports.

District Medical Officers of Health.

<i>Name and Address.</i>	<i>District.</i>
Clarke, Dr. A. E., Council Offices, Rickmansworth.	Rickmansworth Urban.
Collins, Dr. E., The Elms, Sawbridgeworth.	Sawbridgeworth Urban.
Cox, Dr. W. J., Public Health Department, Watford.	Borough of Watford.
Fraser, Dr. H., Westlands, Harpenden.	Harpenden Urban.
Grattan, Dr. H. W., Public Health Department, Welwyn Garden City.	Welwyn Garden City Urban ; Hatfield and Welwyn Rural.
Gross, Dr. M., Town Hall, Hemel Hempstead.	Borough of Hemel Hempstead Berkhamstead and Tring Urban ; Berkhamstead and Hemel Hempstead Rural.
Grosvenor, Dr. A. A., Bowling Green, Stevenage.	Stevenage Urban.
Hardie, Dr. C. F., Wood Street, Barnet.	Barnet Urban and Rural.
Harvey, Dr. W., 25 King Street, Watford.	Bushey and Chorleywood Urban ; Watford Rural.
Macfadyen, Dr. N., 123 Norton Way, Letchworth.	Hitchin and Royston Urban ; Ashwell and Hitchin Rural.
McClymont, Dr. J., Clay Hill, Enfield.	Cheshunt Urban.
Paton, Dr. R. R. K., 36 St. Peter's Street, St. Albans.	City of St. Albans ; St. Albans Rural.
Rose, Dr. A. E., Council Offices, New Barnet.	East Barnet Valley Urban.
Suggit, Dr. B., Hitchin Street, Baldock.	Baldock and Letchworth Urban.
Whitelaw, Dr. A. D., The Castle, Hertford.	Borough of Hertford ; Bishop's Stortford, Hoddesdon, and Ware Urban ; Buntingford, Hadham, Hertford and Ware Rural.



THE HEALTH OF THE COUNTY, 1933.

TABLE I.
STATISTICAL SUMMARY.
(For each District see Table at end of Report.)

	URBAN.			RURAL.			COUNTY.		
	1933. <i>a</i>	1932. <i>b</i>	10 years † <i>c</i>	1933. <i>d</i>	1932. <i>e</i>	10 years † <i>f</i>	1933. <i>g</i>	1932. <i>h</i>	10 years † <i>i</i>
I. Population	293,900	289,000	246,245	127,300	124,400	111,265	421,200	413,400	366,132
II. Birth-rate ...	13·6	13·7	16·1	13·5	13·4	14·8	13·6	13·6	15·9
III. Death-rate	10·8	10·6	10·4	10·7	10·8	10·3	10·8	10·6	10·4
IV. Infant Mor- tality *	44	53	46	37	44	45	42	50	47
V. Epidemic Death-rate	·17	·10	—	·16	·11	—	·16	·10	—
VI. Phthisis Death-rate	·5	·5	·6	·4	·4	·5	·5	·5	·5
VII. Cancer Death-rate	1·3	1·4	1·4	1·3	1·5	1·3	1·3	1·4	1·3

† 1921-1930.

* Per 1,000 Births.

The above figures give a summary of the vital statistics for the County during 1933. The estimated population for the year was 421,200, compared with 413,400 for last year. A study of the above table shows that there is a slight increase in the general death-rate, 10·8 compared with 10·6 for the previous year. There is no change in the birth-rate, which was 13·6.

There is a decrease in the infant mortality, which was 42 compared with 50 for 1932. This equals the previous lowest infant mortality attained which was 42·2 in 1924. There is a slight rise in the maternal mortality, which was 3·4 compared with 3·1 last year. There is a slight rise in the death-rate from pulmonary tuberculosis, namely 0·53 compared with 0·51 for 1932. On the other hand, the death-rate from non-pulmonary tuberculosis is the same as last year, namely 0·10. There is a slight increase in the epidemic death-rate, which was 0·16 compared with 0·10 for the previous year. It is satisfactory to note that the death-rate from malignant disease again shows a slight decrease, being 1·3 compared with 1·4 in 1932 and 1·5 in 1931.

TABLE 2.
POPULATION AND ACREAGE.
(For each District see fly-leaf at end of Report.)

	Acreage (land and water).	POPULATION.			
		Census 1911.	Census 1921.	Census 1931.	Estimate 1933.
Urban Districts ...	70,048	194,263	229,059	280,945	293,900
Rural Districts ...	334,472	117,058	104,136	120,214	127,300
County ...	404,520	311,321	333,195	401,159	421,200
England & Wales ...	37,339,215	36,070,492	37,885,242	39,947,931	—

The 1931 census population for the County was 401,159, the population estimated for 1932 was 413,400, and the estimated population for 1933 was 421,200, which is an increase of 7,800.

TABLE 3.
BIRTH-RATE.

(For each District see fly-leaf at end of Report. For number of births, legitimate and illegitimate, in each district, see Table 26.)

	Hertfordshire.						England and Wales.
	Urban.		Rural.		County.		
	Rate.	Number.	Rate.	Number.	Rate.	Number.	
1911-20 .	18·0	3,971*	18·2	2,003*	18·1	5,974*	21·8
1921-30 .	16·1	3,939*	14·8	1,739*	15·9	5,678*	18·3
1932 .	13·7	3,982	13·4	1,676	13·6	5,658	15·3
1933 .	13·6	4,013	13·5	1,722	13·6	5,735	14·4

The birth-rate for 1933 was the same as for the previous year, namely 13·6; the rate for the urban districts being 13·6 and for the rural 13·5, the birth-rate in the rural districts being slightly higher than last year. The highest birth-rate in the urban districts was 18·3 (Welwyn Garden City), which was also the highest last year, and the lowest 7·3 (Chorleywood). In the rural districts the highest birth-rate was 18·3 (Barnet) and the lowest 10·5 (Hertford).

In two urban districts (Harpenden and Royston) and in three rural districts (Buntingford, Hadham, and Hertford) the death-rate exceeded the birth-rate.

* = Average.

TABLE 4.
DEATH-RATE.

	Hertfordshire.						England and Wales.
	Urban.		Rural		County.		
	Rate.	Number.	Rate.	Number.	Rate.	Number.	
1911-20 .	11·6	2,393*	11·6	1,221*	11·6	3,614*	14·3
1921-30 .	10·4	2,585*	10·3	1,145*	10·4	3,730*	11·8
1932 .	10·6	3,068	10·8	1,344	10·6	4,412	12·0
1933 .	10·8	3,184	10·7	1,367	10·8	4,551	12·3

The death-rate shows a slight increase for 1933, being 10·8 compared with 10·6 for the previous year. The death-rate was higher in the urban districts, 10·8 compared with 10·7 for the rural districts. In the urban districts the highest death-rate was 17·6 (Royston) and the lowest 5·9 (Welwyn Garden City), which were the highest and lowest last year. In the rural districts the highest death-rate was 16·0 (Hadham) and the lowest 6·8 (Welwyn).

The slight rise in the death-rate is due to an increase in the number of deaths from influenza, scarlet fever, diphtheria, pneumonia, and bronchitis.

TABLE 5.
INFANT-MORTALITY.

	Hertfordshire.						England. and Wales.
	Urban.		Rural.		County.		
	Rate.	Number.	Rate.	Number.	Rate.	Number.	Rate.
1911-20 .	67	259*	58	119*	64	378*	100
1921-30 .	46	192*	45	79*	47	271*	81
1932 .	53	211	44	73	50	284	65
1933 .	44	179	37	64	42	243	64

The infant-mortality, which is the number of deaths under twelve months per 1,000 births, shows a distinct fall from 50 to 42, the actual number of deaths being 243 compared with 284 for 1932. This decrease affects both urban and rural districts but is more marked in the former districts; as was the case last

* = Average.

year there was no death under 12 months in Royston. There were no deaths under this age in the rural districts of Berkhamstead and Welwyn. The decrease in the infant mortality was chiefly due to a fall in the number of deaths from congenital debility and premature birth which was 153 compared with 164 last year.

There has been a decrease in the mortality amongst illegitimate infants, which was 101·4 during 1933 compared with 125·5 during 1932. The death-rate in the urban districts was 83·8 compared with 153·8 in the rural districts.

There were 18 deaths from diarrhoea under the age of twelve months compared with 17 last year.

For the prevention of epidemic diarrhoea in infants and young children efforts must be continued in the following directions: (1) The encouragement of the breast-feeding of infants, (2) the provision of a clean milk supply, (3) the attaining of a satisfactory standard of domiciliary cleanliness, (4) the abolition of refuse and flies, and (5) the protection of all milk in the home from contamination by dust and flies. The main precaution is cleanliness in regard to food utensils, food, and milk.

MATERNAL MORTALITY.

NUMBER OF DEATHS OF MOTHERS PER 1,000 BIRTHS.

The number of maternal deaths during the year was 20, compared with 18 last year and 23 in 1931. The maternal mortality was 3·4 compared with 3·1 last year and 3·8 in 1931. Of the 20 maternal deaths 8 were due to puerperal sepsis and 12 were due to other accidents and diseases of pregnancy and parturition, compared with 7 and 11 respectively for last year.

Twelve of the 20 maternal deaths occurred in urban districts and 8 in rural districts. Of the 8 deaths due to puerperal sepsis 7 occurred in urban districts and 1 in rural districts. The following are the districts in which deaths from sepsis occurred: the urban districts of Barnet, Hertford, Hitchin (3), Rickmansworth (2), and the rural district of Hemel Hempstead.

There were 12 cases of puerperal fever notified during the year, 10 from urban districts and 2 from rural districts. The largest number of cases notified from one district was 3.

There were 43 notifications of puerperal pyrexia received during the year compared with 47 last year, 37 from urban districts and 6 from rural districts.

The special feature of these figures is the much greater frequency of puerperal sepsis, even allowing for population, in urban districts, as compared with the rural districts notwithstanding the fact that greater facilities for ante-natal care and treatment exist in the former than in the latter districts.

On the other hand, of the twelve deaths from causes other than puerperal sepsis 5 occurred in urban districts and 7 in rural districts. The greater number of deaths in the rural districts is explained by the absence of, or distance from, those facilities which are essential for the successful treatment of sudden complications associated with pregnancy and labour.

The special measures which are adopted in the County include the services of an obstetric specialist in complicated cases, nursing services, hospital treatment, bacteriological examinations, and assistance towards obtaining sterilized outfits in special cases.

TABLE 6.

CANCER OR MALIGNANT DISEASE.

(Including carcinoma and rodent ulcer. For each district see fly-leaf at end of Report.)

	Hertfordshire.						England and Wales.
	Urban.		Rural		County.		Rate.
	Rate.	Number.	Rate	Number.	Rate.	Number.	
1911-20 .	1.2	252*	1.2	128*	1.2	380*	1.2
1921-30 .	1.4	342*	1.3	151*	1.3	493*	1.2
1932 .	1.4	410	1.5	191	1.4	601	1.2
1933 .	1.3	402	1.3	176	1.3	578	—

It is satisfactory to be able to report a further decrease in the death-rate from malignant disease.

The total number of deaths from this disease during the year was 578, compared with 601 for the previous year, which gives a death-rate of 1.3 compared with 1.4. Of the total number of deaths 402 were in urban districts and 176 in rural districts.

* = Average.

and 268 were males and 310 were females compared with 307 and 294 respectively last year. There has been a fall in the death-rate in both urban and rural districts, but more marked in the latter.

A study of the sex incidence of the disease shows that the reduction has been due to decrease in the number of deaths amongst males, the deaths in females having increased. The highest death-rate in urban districts occurred in Royston and it is significant to note that Royston has the second lowest birth-rate in the County and had no deaths from epidemic disease and no deaths under the age of 12 months.

TABLE 7.
TUBERCULOSIS.

CRUDE DEATH-RATES FROM PULMONARY TUBERCULOSIS.
(For each District see Fly-leaf at end of Report.)

	Hertfordshire.						England and Wales.
	Urban.		Rural.		County.		
	Rate.	Number.	Rate.	Number.	Rate.	Number.	Rate.
1911-20 .	.8	169*	.7	79*	.7	248*	1.0
1921-30 .	.6	158*	.5	63*	.5	221*	.7
1932 .	.53	153	.47	58	.51	211	1.1
1933 .	.55	163	.47	60	.53	223	—

The death-rate from pulmonary tuberculosis shows a slight increase, being 0.53 compared with 0.51 for 1932; the increase has occurred in the urban districts. The death rate from non-pulmonary tuberculosis is the same as last year, namely 0.10; this represents an increase in the rural districts but a distinct fall in the urban districts.

The number of cases of tuberculosis notified during the year was 620 compared with 586 for the previous year. Of the total numbers 480 were pulmonary cases and 140, compared with 162 last year, were non-pulmonary cases. In the following tables particulars are given of the number of cases notified and of the number of deaths from tuberculosis in the various urban and rural districts in the County.

* = Average.

TABLE 8.

GIVING THE NOTIFICATION-RATE AND DEATH-RATE FROM NON-PULMONARY TUBERCULOSIS.

District	Popula- tion	Number of Cases Notified			Number of Deaths			Attack Rate per 1,000	Death- rate per 1,000
		M.	F.	Total	M.	F.	Total		
<i>Urban.</i>									
Baldock	3,365	1	1	2	1	—	1	·59	·29
Barnet . . .	16,020	2	4	6	3	1	4	·37	·25
Berkhampstead . . .	8,452	—	—	—	—	—	—	—	—
Bishop's Stortford . . .	10,160	—	1	1	1	1	2	·09	·19
Bushey . . .	11,700	1	—	1	—	—	—	·08	—
Cheshunt . . .	15,180	—	—	—	—	1	1	—	·06
Chorleywood . . .	3,418	1	—	1	—	—	—	·29	—
East Barnet Valley . . .	20,360	2	2	4	—	—	—	·19	—
Harpenden . . .	9,113	3	3	6	2	1	3	·66	·33
Hemel Hempstead . . .	15,520	2	—	2	—	1	1	·12	·06
Hertford . . .	12,320	1	2	3	—	—	—	·24	—
Hitchin . . .	15,030	4	2	6	1	1	2	·39	·13
Hoddesdon . . .	7,716	2	3	5	—	1	1	·65	·13
Letchworth. . .	14,480	2	4	6	—	2	2	·41	·13
Rickmansworth . . .	11,130	—	1	1	—	—	—	·09	—
Royston . . .	3,803	2	—	2	—	—	—	·52	—
St. Albans . . .	30,160	6	3	9	4	1	5	·30	·16
Sawbridgeworth . . .	2,799	1	—	1	—	—	—	·35	—
Stevenage . . .	5,552	3	1	4	1	—	1	·72	·18
Tring . . .	4,465	1	—	1	—	—	—	·22	—
Ware . . .	6,501	2	2	4	—	—	—	·61	—
Watford . . .	57,370	9	6	15	2	3	5	·26	·08
Welwyn Gdn. City . . .	9,286	1	2	3	—	1	1	·32	·10
Total Urban . . .	293,900	46	37	83	15	14	29	·28	·09
<i>Rural.</i>									
Ashwell . . .	3,515	—	—	—	—	—	—	—	—
Barnet . . .	6,808	2	2	4	1	3	4	·59	·59
Berkhampstead . . .	5,230	—	—	—	—	—	—	—	—
Buntingford . . .	4,685	1	1	2	—	—	—	·42	—
Hadham . . .	5,497	2	—	2	1	—	1	·37	·18
Hatfield . . .	12,400	—	2	2	—	1	1	·16	·08
Hemel Hempstead . . .	8,640	3	2	5	—	—	—	·58	—
Hertford . . .	7,663	1	2	3	—	—	—	·39	—
Hitchin . . .	14,700	5	4	9	1	1	2	·61	·14
St. Albans . . .	21,090	5	6	11	2	3	5	·52	·23
Ware . . .	13,300	6	4	10	—	1	1	·75	·07
Watford . . .	19,810	3	3	6	2	1	3	·30	·15
Welwyn . . .	3,962	2	1	3	—	—	—	·75	—
Total Rural . . .	127,300	30	27	57	7	10	17	·44	·13
Total Urban. . .	293,900	46	37	83	15	14	29	·28	·09
Total Urban and Rural	421,200	76	64	140	22	24	46	·33	·10

TABLE 9.

GIVING PARTICULARS OF THE NOTIFICATION-RATE AND DEATH-RATE FROM PULMONARY TUBERCULOSIS.

District	Popula- tion	Number of Cases notified			Number of Deaths			Attack Rate per 1,000	Death- rate per 1,000
		M.	F.	Total	M.	F.	Total		
<i>Urban.</i>									
Baldock . . .	3,365	2	1	3	1	3	4	.89	1.18
Barnet . . .	16,020	11	9	20	6	1	7	1.24	.43
Berkhampstead . . .	8,452	10	3	13	1	1	2	1.53	.23
Bishop's Stortford . . .	10,160	4	8	12	4	2	6	1.18	.59
Bushey . . .	11,700	7	7	14	2	3	5	1.19	.42
Cheshunt . . .	15,180	4	7	11	3	1	4	.72	.26
Chorleywood . . .	3,418	—	1	1	2	1	3	.29	.88
East Barnet Valley . . .	20,360	14	10	24	6	4	10	1.18	.49
Harpenden . . .	9,113	5	1	6	2	1	3	.66	.33
Hemel Hempstead . . .	15,520	8	15	23	7	5	12	1.48	.77
Hertford . . .	12,320	4	6	10	2	5	7	.81	.56
Hitchin . . .	15,030	6	4	10	3	3	6	.66	.39
Hoddesdon . . .	7,716	3	1	4	—	—	—	.52	—
Letchworth . . .	14,480	8	1	9	6	—	6	.62	.41
Rickmansworth . . .	11,130	1	2	3	1	3	4	.27	.36
Royston . . .	3,803	2	1	3	3	2	5	.79	1.31
St. Albans . . .	30,160	35	17	52	13	9	22	1.72	.72
Sawbridgeworth . . .	2,799	1	—	1	1	—	1	.35	.35
Stevenage . . .	5,552	2	—	2	—	—	—	.36	—
Tring . . .	4,465	3	2	5	1	3	4	1.12	.90
Ware . . .	6,501	7	7	14	1	1	2	2.15	.31
Watford . . .	57,370	48	37	85	25	19	44	1.48	.77
Welwyn Garden City . . .	9,286	9	6	15	3	3	6	1.61	.64
Total Urban . . .	293,900	194	146	340	93	70	163	1.16	.55
<i>Rural.</i>									
Ashwell . . .	3,515	—	—	—	—	—	—	—	—
Barnet . . .	6,808	4	10	14	5	2	7	2.05	1.03
Berkhampstead . . .	5,230	3	3	6	2	—	2	1.14	.38
Buntingford . . .	4,685	2	3	5	—	2	2	1.07	.42
Hadham . . .	5,497	6	4	10	2	2	4	1.81	.73
Hatfield . . .	12,400	9	8	17	2	—	2	1.37	.16
Hemel Hempstead . . .	8,640	6	11	17	1	2	3	1.97	.34
Hertford . . .	7,663	3	2	5	3	2	5	.65	.65
Hitchin . . .	14,700	2	9	11	1	4	5	.75	.34
St. Albans . . .	21,090	8	18	26	3	8	11	1.23	.52
Ware . . .	13,300	9	3	12	5	3	8	.90	.60
Watford . . .	19,810	7	6	13	4	4	8	.65	.40
Welwyn . . .	3,962	2	2	4	3	—	3	1.00	.75
Total Rural . . .	127,300	61	79	140	31	29	60	1.09	.47
Total Urban . . .	293,900	194	146	340	93	70	163	1.16	.55
Total Urban and R.	421,200	255	225	480	124	99	223	1.14	.53

Of the deaths from pulmonary tuberculosis 163 occurred in urban districts compared with 153 last year, and 60 in rural districts compared with 58. Of the total deaths 124 were males compared with 127 last year and 99 were females compared with 84, so that the increase has been in the case of females only. The largest number of deaths, namely 50, occurred in the 25-35 age group in urban districts and in this age group the females number 28 and the males 22. In the urban districts the deaths of females predominate in the 15 to 25 age group, the figures being males 9 and females 17; in no other group is this predominance of female deaths so marked.

Of the deaths from non-pulmonary tuberculosis 29 occurred in urban districts compared with 34 last year and 17 in rural districts compared with 11, so that while there is an increase in the rural district there is a decrease in the urban districts.

Preventive Measures.—The measures adopted with a view to the prevention of tuberculosis are well known and have been described in previous reports. Considerable advance is being made in the improvement of home conditions by the provision of new houses and by the elimination of slum dwellings. The statistics for the year still show the predominance of deaths of females over males in the young age group 15-25, most marked in urban districts. The explanation of this, as has previously been stated, is no doubt due to impaired resistance caused by the restriction, voluntary or otherwise, of the amount of fatty foods taken. During the young adult age period the taking of suitable and adequate nourishment is essential to secure protection against tuberculosis especially when, as is frequently the case, occupation of a confined and sedentary character or employment which demands considerable physical or nervous strain is being followed. In the home the control of infection is an essential preventive measure, and no step is more important in securing this than the early diagnosis of existing cases; it is with a view to this that the examination of contacts of open cases of the disease is carried out.

Improvement in the milk supply and the increased number of producers who are selling "graded" milk must continue to exercise influence on the incidence of certain forms of non-pulmonary tuberculosis. While the death-rate from this type of the disease is the same as last year there is a considerable fall in the number of cases notified.

The following steps are taken with a view to closer co-operation in preventive effort between the County Council and Local Sanitary Authorities. Information of all cases of

pulmonary tuberculosis with tubercle bacilli in the sputum is sent to the District Medical Officer of Health. This supplements the information from notification and provides more accurate information regarding open cases of the disease.

Information is sent to the District Medical Officer of Health regarding the death of a patient and of removal of a patient to hospital or sanatorium so that disinfection may be carried out. The reports regarding the home conditions of patients forwarded by the health visitors and nurses contain from time to time references to insanitary conditions, structural defects, overcrowding, etc. The information thus obtained is forwarded to the District Medical Officer of Health with a request that such action may be taken as may be considered necessary.

With a view to securing the co-operation of the Medical Practitioner a special form is sent giving particulars regarding the result of examination by the Tuberculosis Officer, the result of the examination of the sputum and the treatment which has been recommended. Subsequent reports giving particulars of any special alteration in treatment are also sent.

During the year 302 home conditions forms were forwarded by the Health Visitors, from which the following particulars have been obtained.

TABLE 10.
HOME CONDITIONS.

	Good.	Indifferent.	Bad.
Insured	78·0	19·8	2·2
Uninsured	72·3	22·4	5·3
Total	75·2	21·1	3·7

NUMBER OF PERSONS PER BEDROOM.

	Two or less.	Three.	Four.	Over Four.
Insured	80·7	15·5	3·3	0·5
Uninsured	79·2	15·0	4·6	1·2
Total	79·9	15·3	3·9	0·9

Examination of Patients.—During the year 956 persons were examined compared with 950 last year, with a view to diagnosis and, if necessary, treatment. The results found on examination were as follows : Pulmonary or root tuberculosis, 351 ; non-pulmonary tuberculosis, 77 ; combined pulmonary and non-pulmonary tuberculosis, 20 ; suspect, 88 ; not tuberculosis, 420. The figure of persons examined includes a number of contacts of which particulars of 54 have been received. A number of contacts were also examined by medical practitioners in the County.

In cases in which the diagnosis is doubtful patients are admitted to the County Sanatorium for a period of observation. During the year 37 cases were admitted to the Sanatorium for this purpose.

Treatment.—This comprises sanatorium treatment for pulmonary cases, hospital treatment for non-pulmonary cases, dispensary treatment for ambulant cases and domiciliary treatment for patients who, owing to their condition, have to be treated in their homes. In addition, cases of tuberculosis of the skin are sent to the London Hospital for light treatment. During the year 450 patients were admitted to sanatoria and hospitals for treatment and observation. At the end of the year 204 patients were under treatment or observation in these institutions. In addition to these there were admitted to Public Assistance Institutions 106 patients, of whom 80 were suffering from pulmonary tuberculosis ; 64 patients were discharged from such institutions during the year. At the end of the year there were 20 patients in Public Assistance institutions of whom 16 were suffering from pulmonary tuberculosis.

Dr. Sharp, Medical Superintendent of the County Sanatorium, reports that during the year 333 patients were admitted and that in 304 patients a term of treatment was completed. Of these 186 had improved, 41 had not improved, 44 had died, and in 33 the diagnosis was not confirmed.

The condition of the patients admitted to the Sanatorium during the year was as follows :—Early stage, 23 ; intermediate stage, 194 ; advanced stage, 78 ; suspects, 37 ; and surgical, 1.

The results obtained during the year are shown as follows :—Able to work or improved, 186 ; not improved, 25 ; worse, 16 ; diagnosis not confirmed, 33 ; died, 44.

Of the cases admitted in 203 the sputum was positive and in 130 the sputum was negative.

The daily average number of beds occupied during the year was 131.

TABLE II.

RETURN SHOWING THE IMMEDIATE RESULTS OF TREATMENT OF
PATIENTS AND OF OBSERVATIONS OF DOUBTFUL CASES DIS-
CHARGED FROM RESIDENTIAL INSTITUTIONS DURING THE
YEAR 1933.

Classification on admission to the Institution.		Condition at time of discharge	Duration of Residential Treatment in the Institution.												Total
			Under 3 months			3-6 months			6-12 months			More than 12 months			
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
PULMONARY TUBERCULOSIS.	Class T.B. minus.	Quiescent . . . Not Quiescent . . Died in Institution	- 10 1	- 22 -	1 1 -	- 23 -	- 13 1	10 2 -	- 5 1	- 5 -	9 4 -	- 1 -	- 1 -	3 - -	23 87 3
	Cls. T.B. plus. Group 1.	Quiescent . . . Not Quiescent . . Died in Institution	- 2 -	- 4 -	- - -	- 1 -	- 3 -	- - -	- 2 -	- 4 -	- - -	- - -	- 1 -	- - -	- 17 -
	Class T.B. plus. Group 2.	Quiescent . . . Not Quiescent . . Died in Institution	- 14 1	- 7 2	- - -	- 18 -	- 8 1	- - -	- 9 2	- 10 1	- - -	- - 4	- 1 1	- - -	- 67 12
	Class T.B. plus. Group 3.	Quiescent . . . Not Quiescent . . Died in Institution	- 8 9	- 5 3	- - -	- 12 7	- 8 3	- - -	- 9 3	- 7 1	- - -	- 2 3	- 2 1	- - -	- 53 30
Non-PULMONARY TUBERCULOSIS.	Bones & Joints.	Quiescent . . . Not Quiescent . . Died in Institution	- 6 -	2 2 1	- - -	- - -	1 - 1	- - -	- 1 -	- - -	- 1 1	1 1 -	2 - -	8 2 -	14 13 3
	Abdominal.	Quiescent . . . Not Quiescent . . Died in Institution	- 1 -	- 2 -	- 1 -	- - 1	1 - 1	1 1 -	- - -	- 1 -	- - -	- - -	- - -	- - -	2 6 2
	Other Organs.	Quiescent . . . Not Quiescent . . Died in Institution	- 2 -	- 2 -	- 1 -	- 1 -	- - -	- - -	- 1 -	- 1 -	- - -	- - -	- - -	- - -	- 7 1
	Peripheral Glands.	Quiescent . . . Not Quiescent . . Died in Institution	1 3 -	- 3 -	3 11 -	- - -	- - -	2 1 -	- - -	- 1 -	4 - -	- - -	- - -	2 - -	12 19 -
			PULMONARY.						NON-PULMONARY.						
			Under 4 weeks			Over 4 weeks			Under 4 weeks			Over 4 weeks			
Observation for purpose of diagnosis.	Tuberculous . . . Non-tuberculous . . Doubtful . . .	3 9 2	4 14 -	1 - -	1 - -	- 7 -	- - -	3 1 -	- 2 -	- 1 1	- - -	- 2 -	- 3 -	12 39 3	

Seventeen patients were transferred from the County Sanatorium to various institutions for the treatment of various complications or for other reasons: 6 to Hertford County Hospital, 1 to Victoria Park Hospital, 4 to Papworth Colony, 1 to Mid Herts Hospital, St. Albans, and 5 to Public Assistance Institutions.

In addition to the ordinary conservative regime various forms of special treatment are carried out with a view to check activity, increase resistance, and promote recovery. The following figures give some particulars of these various forms of treatment:—Tuberculin: 60 patients received injections of tuberculin; in 35 the treatment was successfully continued, in the remaining cases treatment was discontinued for various reasons. Sanocrysin: 40 patients were treated of whom 15 completed the course; in 3 additional cases the sanocrysin was replaced by allocrysin; in the remaining cases treatment was discontinued for various causes. Artificial pneumothorax: 49 patients received this form of treatment in 32 of whom treatment was successfully continued; in the remaining cases treatment was discontinued because of the absence of space or for other reasons. Other special preparations used in treatment included collosol calcium and calcium chloride, edwinil, and euflavine.

The Laboratory at the Sanatorium continues to do useful work; during the year 565 specimens of sputum were examined; in addition it has now been made a routine practice to examine the blood sedimentation rates of all patients on admission and on discharge.

Cases of cutaneous tuberculosis receive light treatment at the London Hospital; during the year 18 patients received such treatment. The results obtained by the light treatment of lupus are with few exceptions highly satisfactory.

Nursing of Patients.—The following figures supplied to me by Miss Harrington giving some indication of the work of the district nurses in the County in connection with the nursing of patients suffering from tuberculosis.

During the year, the District Nurses have attended 182 cases, of which 84 were nursing cases and 98 observation cases. They have also visited 251 cases for the purpose of taking temperatures. In addition, 277 home condition reports, 60 shelter reports, and 321 supplementary reports on patients' condition have been filled in and forwarded, making a total of 658 reports. The number of visits made by the District Nurses to the homes of tuberculosis patients during the year was 7,613.

TABLE 12.
GIVING PARTICULARS OF DISPENSARY WORK, 1933.

Dispensaries	Number of Nurses' attendances at Dispensary	Number of patients	Discharged—no further treatment necessary	Sanatorium or discharged for other reasons	On books at end of year	Number of patients' attendances at Dispensary
DISTRICT NURSES :						
Berkhamsted	24	83	8	51	24	157
Bishop's Stortford	24	71	5	42	24	226
Hatfield	23	47	1	33	13	126
Hemel Hempstead	51	130	11	91	28	352
Hitchin	51	189	17	111	61	591
Hertford	49	227	10	125	92	833
Royston	12	15	3	7	5	29
St. Albans	64	285	35	183	67	487
Waltham Cross	52	105	10	71	24	317
Watford { Children	23	129	1	98	30	216
{ Adults	48	249	2	161	86	605
COUNTY COUNCIL HEALTH VISITORS :—						
Barnet	51	209	13	153	43	647
Letchworth	51	142	12	97	33	365
Totals	523	1,881	128	1,223	530	4,951

During the year the County Council Health Visitors have attended 51 cases. In addition, they have filled in 25 home condition reports, 2 shelter reports, and 39 supplementary reports on patients' condition, making a total of 66 reports. The number of visits made by the Health Visitors to the homes of tuberculous patients during the year was 529.

The total number of visits paid to the homes of patients by District Nurses and Health Visitors was 8,142.

Summary of New Work during the Year.—In the following table particulars are given of the work carried out during the year in connection with tuberculosis, including recommendations for treatment in the case of new patients.

Number of cases examined	956
Cases treated in sanatoria	367
Cases treated in hospitals	83
Cases treated at home	375
Cases treated at dispensaries	93
Cases under observation	159
Contacts examined	54
Cases recommended milk	40
Shelters issued	21
Specimens of sputum examined	2,065
Tubercle bacilli present	745

VENEREAL DISEASES.

The number of new patients from Hertfordshire attending clinics in London during 1933 was 328 compared with 269 for 1932 and 257 for 1931. Of this number 198 compared with 148 were cases of venereal disease, and 130 were found not to be suffering from this disease. The total attendances for the year were 8,502 compared with 6,340 for 1932. The number of in-patient days was 711 compared with 694 last year, and the number of doses of salvarsan or its substitutes given during the year was 844 compared with 684.

These figures indicate an increase of work in connection with the treatment of venereal diseases during the year. The higher figures may be partly due to some increase in the active incidence of the disease but are no doubt chiefly the result of more advantage being taken of the facilities for treatment offered under the Scheme.

The amount of work carried out during the year is shown in the following table:—

TABLE 13.
ANNUAL SUMMARY FOR 1933.

Hospitals.	New Patients.					Total Atten- dances.	In- patient days.	Salvar- san. No. of doses.
	Syp.	S.C.	Gon.	Not V.D.	Total.			
Albert Dock	—	—	—	—	—	—	—	—
Royal Northern	10	—	27	23	60	1979	—	137
Hospital for Sick Children, Gt. Ormond Street	5	—	—	19	24	237	—	141
Guy's	2	2	10	11	25	386	19	73
King's College	—	—	2	—	2	18	9	—
Metropolitan	—	—	—	—	—	—	—	—
Middlesex	3	—	12	—	15	714	—	24
Miller General	—	—	—	—	—	—	—	—
Royal Free	4	—	15	12	31	729	50	80
St. George's	4	—	7	1	12	156	—	28
St. John's, Lewisham	—	—	—	—	—	—	—	—
St. Mary's	4	—	3	4	11	140	—	31
St. Paul's	4	1	15	14	34	690	40	37
St. Thomas'	13	1	18	39	71	1,317	77	108
Seamen's	3	—	—	—	3	10	40	2
S. London for Women	—	—	1	—	1	16	—	—
University College	5	—	16	1	22	1,675	—	50
West London	—	—	—	2	2	45	—	24
Westminster	1	—	1	—	2	46	—	47
S. Army Mothers' Hospital	1	—	2	1	4	21	268	7
Children's Medical Home	—	—	—	—	—	—	208	—
Whitechapel Clinic	1	—	5	3	9	323	—	55
Total	60	4	134	130	328	8,502	711	844

The total number of pathological examinations made for private practitioners in the County during the year is 208.

The number of pathological examinations carried out for practitioners was 208, compared with 228 for the previous year, while the number of pathological examinations carried out for or at the centres in London was 1,994. Of these examinations, 30 were for spirochaetes, 1,102 for gonococci, 524 for Wassermann reaction, and 338 for other reasons.

BLIND PERSONS.

Under "The Blind Persons Act, 1920", the County Council prepared a scheme for promoting the welfare of blind persons ordinarily resident within their area, which came into operation on the 1st April, 1923.

Administrative Scheme.

Area.—The area to be covered for the purposes of this scheme is the Administrative County of Hertford.

Date of Commencement.—The scheme to come into operation on the first day of the month following its approval by the Minister of Health and on that day all previous schemes to be revoked.

Objects.—To provide in approved cases for :—

- (a) Children under School age.
- (b) Employment.
- (c) Home Workers.
- (d) Home Teachers.
- (e) Maintenance Grants in Homes.
- (f) Maintenance Grants in Hostels.
- (g) Assistance to unemployable or other destitute blind persons.
- (h) Registration.
- (j) General Social Welfare
- (k) Miscellaneous.

Arrangements for carrying out the various objects of the Scheme.

The County Council to avail themselves as far as they may deem necessary of the assistance of the Hertfordshire Society for the Blind, or other similar agency working on behalf of the blind, but no arrangements to be carried out under this scheme with respect to any blind persons unless such arrangements shall have received the sanction of the County Council, or a Committee of the Council to whom the Council shall have delegated their powers.

(a) *Children under School Age.*

To consider cases of infants born blind, or with sight so defective as to be unable to distinguish common objects. When considered necessary by the County Council arrangements to be made for such children to be boarded out or sent to a residential home for blinded babies, and parents should be encouraged to contribute according to means.

This work will be carried out direct by the County Council.

(b) *Employment.*

Provision to be made, as far as the Council may deem necessary, for the employment of suitable blind persons in workshops for the blind or elsewhere, and for the payment to them of augmentation of earnings on a scale approved by the Council.

(c) *Home Workers.*

Arrangements to be made for the employment of suitable blind persons in the Home Workers' Scheme, conducted by the London Society for Teaching and Training the Blind, Swiss Cottage, or any other Society for the Blind performing similar functions approved by the Council from time to time; the general conditions of employment, including the rate of augmentation, to be subject to the approval of the Council.

(d) *Home Teachers.*

Arrangements to be made for the home teaching and visiting of the blind, and for this purpose the Hertfordshire Society for the Blind shall appoint such home teachers as may be approved by the Council.

(e) *Maintenance Grants in Homes.*

The County Council to make arrangements for the maintenance of blind persons whom it may be considered desirable to send to a Home for the Blind, which is approved by the Council.

(f) *Maintenance Grants in Hostels.*

The County Council to make arrangements for the maintenance of blind persons employed in approved workshops and resident in a hostel approved by the Council, who, for lack of housing or for some other satisfactory reason, may require such provision.

(g) *Assistance to Unemployable or other Destitute Blind Persons.*

(i) In conjunction with the Public Assistance Committee, to consider the cases of unemployable or other destitute blind

persons who are in need of institutional or other non-domiciliary assistance, and to render such assistance as may be desirable in each case, either by payment of recognized fees at approved homes for the blind, by boarding out, or otherwise.

(ii) To provide such domiciliary assistance as may be necessary to any blind person who, in accordance with the declaration made with regard to the domiciliary assistance of blind persons in the Council's Administrative Scheme under Part I of the Local Government Act, 1929, must be dealt with under the Blind Persons Act, 1920.

(h) *Registration.*

To arrange to provide a system of registration of all blind persons living within the area.

(j) *General Social Welfare.*

To make provision for the general social welfare of the blind.

(k) *Miscellaneous.*

To exercise any of the powers and duties of the County Council under Section 2 (1) of the Blind Persons Act, 1920.

REGULATIONS FOR ADMINISTRATION OF DOMICILIARY ASSISTANCE TO NECESSITOUS BLIND PERSONS.

(a) All applications for domiciliary assistance under the Blind Persons Act, 1920, shall be addressed to the Clerk of the County Council.

(b) Such applications for assistance shall be investigated by an officer of the County Council.

(c) The amount of domiciliary assistance to be given to necessitous blind persons shall be determined by the appropriate Committee upon the merits of each individual case and after taking into account the existing means of the blind person.

(d) All cases granted domiciliary assistance shall be reviewed in detail at least once in twelve months.

(e) The domiciliary grants shall be paid through the Hertfordshire Society for the Blind, or other similar agency working on behalf of the blind, weekly at the home of the recipients, and the Society shall obtain a receipt for such payments on the prescribed form.

(f) These regulations shall come into operation on the 1st day of the month following its approval by the Minister of Health.

Registration.—A system of registration of all blind persons living within the area is carried out by the County Medical Officer of Health.

In carrying out the scheme described above, the County Council have secured the help and co-operation of the Hertfordshire Society for the Blind and the County Nursing Association. The register of blind persons in the County which has been prepared contained :—

		<i>Males.</i>	<i>Females.</i>	<i>Total.</i>
At 31st March, 1925	.	168	186	354
" " 1926	.	188	203	391
" " 1927	.	191	226	417
" " 1928	.	211	249	460
" " 1929	.	213	255	468
" " 1930	.	207	255	462
" " 1931	.	212	254	466
" " 1932	.	205	251	456
" " 1933	.	202	250	452

During 1933 there were added to the register 39 blind persons, compared with 39 last year, 20 males and 19 females. The number removed from the register during the year was 43, of which 23 were males and 20 were females ; 88 cases are at present receiving grants from the County Council, 48 males and 40 females.

MENTAL DEFICIENCY.

The number of cases reported with a view to investigation as to whether they were mentally defective within the meaning of the Act was 108, compared with 83 during the previous year. Of this number, 71 were found to be mentally defective and two were epileptic ; the remainder, after careful examination and testing as to their standard of intelligence, were not regarded as mentally defective within the meaning of the Act.

These figures show that there has been some increase in the number of cases referred for investigation during the year. Reference to the numbers for previous years shows that the figure varies considerably from year to year. The high figure of 166 for 1931 was due to a systematic investigation of the number of mental defectives in Public Assistance institutions liable to be dealt with under the Act. During 1933 special attention has been directed to mental defectives in Mental Hospitals who are suitable for transfer to Cell Barnes Colony, and who should no longer be retained in a mental hospital.

The number of mental defectives so far ascertained in the county represented in 1932 a ratio of 3.57 per 1,000 of the population. According to the Wood Committee's report the probable average for the country, excluding educable children of school age, would be 4.52 per 1,000. This ratio represented in figures based on the present population would be approximately 14,385, and 18,495 respectively.

Included in the cases ascertained during the year are a number of cases in mental hospitals. These were ascertained prior to obtaining an order for transfer to Cell Barnes Colony. Owing to the absence of certified institutional accommodation in the County prior to the opening of Cell Barnes a considerable number of mental defectives, chiefly owing to the difficulty of controlling them at home, were dealt with under the Lunacy Acts and admitted to Mental Hospitals. Such defectives as are suitable should be transferred to a certified institution so as to set free accommodation in Mental Hospitals which is more urgently required for the treatment of cases of mental disorder. At the same time it is necessary to realize that certain cases of mental deficiency suffer from phases of mental disorder. Such cases are more suitably dealt with in a mental hospital than in an institution for mental defectives.

Table 14 gives the results of the examination of the 108 cases referred for examination, with particulars as to the condition and grade of defect. Of the 108 cases reported, 63 were males and 45 were females, while 25 were above the age of 21, and 83 were below that age. Of these cases, 65 were from urban districts and 43 from rural districts.

TABLE 14.—PARTICULARS AS TO TYPE OF MENTAL DEFECT.

	Males		Females		Total
	Under 21	Over 21	Under 21	Over 21	
Idiots	2	—	3	—	5
Imbeciles	9	4	4	1	18
Feeble-minded	14	7	14	10	45
Epileptic and Feeble-minded	—	1	—	—	1
Epileptic and Idiot . . .	—	—	—	—	—
Epileptic Imbecile . . .	1	1	—	—	2
Epileptic	—	—	2	—	2
Physically Defective . . .	12	—	5	—	17
Dull and Backward . . .	9	—	5	—	14
Doubtful	3	—	—	1	4
Totals	50	13	33	12	108

In the above table particulars are given of the type of defect in all cases examined, and of the group to which they belong. Of the 108 cases examined, 71 were returned as mentally defective, the largest group, namely 26, being males under the age of 21, and of this group 14 are feeble-minded. The number of females in this group was 21. Of the total number examined, 37 were found not to be mentally defective within the meaning of the Act, the largest number of these being returned as dull and backward.

TABLE 15.—PARTICULARS AS TO CIRCUMSTANCES AND PROCEDURE ADOPTED.

	Males	Females	Total
Sent to Certified Institution or placed under Guardianship (including cases reported in 1932)	153	122	275
Referred to Education Committee	42	29	71
Under proper care, no action desired by parents, able to work, or no action taken	5	5	10
On waiting list	12	6	18
Totals	212	162	374

Institution Accommodation.—During the year, 275 cases were sent to certified institutions or were placed under guardianship, as against 25 so dealt with in 1932. Admission of children to Kingsmead School are not included in this figure. Of the 266 cases admitted to Cell Barnes, 150 were males and 116 females. Four cases were sent to special residential institutions and 4 were placed under guardianship. Of the cases sent to special institutions, two were sent to Beresford Court, Worcestershire, and one each to the Rampton State Institution and St. Joseph's Home. In addition one female was admitted to the certified accommodation at "Shrodells". The number of mental defectives in this Institution at the end of the year was 13, and the number discharged during the year was 31, including one defective on "licence".

No cases were admitted to the certified accommodation at the Bishop's Stortford Institution during the year. At the end of the year 11 cases were in this Institution, and during the year 7 were discharged.

The majority of cases dealt with during the year have been admitted to Cell Barnes Colony, most of these are defectives who have been transferred from a certified institution, public assistance institution, or mental hospital within or outside the County. A few cases of an urgent character have been

admitted because of the low-grade of the type or owing to home conditions. The transfer of cases from Kingsmead School to Cell Barnes is now being carried out. Careful consideration is given to the necessity of such transfer, attention being specially directed to the necessity for further training and for care and protection in the case of females. Where the home conditions are good and protection and supervision are apparently adequate the pupil on leaving the school at the age of 16 is discharged into the care of the parents. Children of low-grade type who are ineducable or who cannot be instructed without adversely affecting the rest of the class will have to be dealt with by transferring to Cell Barnes.

Guardianship.—During the year, 3 additional cases were placed under guardianship, as compared with 19 last year. At the present time there are 109 under guardianship in the County, of which 63 are Hertfordshire cases and 46 are out-County cases. In addition there are 10 County cases under the care of the Guardianship Society, Brighton.

The defectives placed under guardianship in the County are well cared for. Those of the higher grade are usually employed, but experience has shown that it is much more difficult to keep a defective engaged in regular employment if there has been no previous period of training in an institution. The defectives under guardianship are visited periodically, and in cases which require it assistance is given to obtain necessary medical and dental treatment.

Statutory Supervision.—This continues to be carried out by the nurses of the District Nursing Associations in the County, of which there are 87 in number ; in addition there are three County Council health visitors. Visits are made by the nurses to the defectives in their homes ; these visits vary from once a fortnight to twice a year, the most frequent being monthly, two monthly, and quarterly. A note of each visit is made on the record card with particulars as to any condition relating to the defective to which attention should be drawn. The cards are sent to the County Medical Office at the end of each quarter and they serve as a connecting link between the defectives living at home and the Authority under the Act.

The number of defectives to whom visits were paid by the nurses during 1933 was 351, and the number of visits paid to their homes was 2,242. Of the 351 defectives, 186 were males and 165 were females, and of the 2,242 visits 1,146 were paid to males and 1,096 to females. During the year 91 forms giving

particulars regarding the home conditions and circumstances of the defectives were forwarded to the County Medical Officer.

Training and Employment.—Any scheme for dealing with mental defectives must include facilities for training in the form of employment for which the defective is best suited. As regards capacity for work mental defectives may be divided broadly into three groups (*a*) unemployable, (*b*) partially employable under supervision, and (*c*) employable either with or without supervision. The main provision for such training must be at Cell Barnes Colony, but it should be linked up with the manual training given at Kingsmead School or elsewhere. In the case of high grade defectives the completion of a course of training in the Colony and their capacity to undertake useful work will eventually lead to consideration of the possibility of “discharge on licence”, preferably for employment in some institution in the County or under the supervision of responsible persons. This question of discharge on licence is, however, not one which is likely to call for extensive consideration for some time to come.

PUBLIC ASSISTANCE.

There is little new to report as regards the medical services in connection with Public Assistance during the year. The work throughout the County which is in great measure routine in character has been carried out efficiently and well, and only difficulties of a minor character have been met with. The Public Assistance Service is closely linked with the Public Health Service in the County and the value of this linking up in dealing with the difficulties presented by unusual cases is emphasized from time to time. The co-ordination of the Public Assistance Services in the various districts in the County under one authority has greatly facilitated action in dealing with the various types of disease and conditions of abnormal health for which your Council is responsible. The ready response of the Medical Officers and Masters of Public Assistance Institutions in dealing with difficult cases which arise is much appreciated by your Medical Officer of Health.

The following table shows the existing accommodation in the County Institutions :—

Guardians Committee Area.	Institution.	SICK WARDS.			OTHER WARDS.			Total.
		Men.	Women.	Children.	Men.	Women.	Children.	
Barnet .	Barnet . . .	—	—	—	110	81	30	221
	„ Wellhouse Hospital	99	171	55	—	—	—	325
	Hatfield . . .	—	53	—	3	17	—	73
Bishop's Stortford	Bishop's Stortford	75	84	7	59	77	11	313
Dacorum .	Hemel Hempstead	23	29	4	57	26	7	146
	Berkhamsted . .	16	23	2	14	21	7	83
East Herts	Ware . . .	22	16	2	78	62	10	190
Hitchin .	Hitchin . . .	34	38	—	89	48	18	227
St. Albans	St. Albans . .	58	80	—	61	49	18	266
Watford .	Watford . . .	142	157	14	133	102	30	578
	Total . . .	469	651	84	604	483	131	2,422

Under agreements with Voluntary Hospitals :—

Hertford County Hospital	50
Bishop's Stortford Voluntary Hospital	20

Grand total 2,492

County Institutions.—The year has seen considerable progress in connection with the extensions and improvements at various Public Assistance Institutions in the County. The extensions and improvements at Haymeads, Bishop's Stortford, were completed during the year and they have quite altered the appearance and status of that institution; the new ward accommodation is excellent. Progress is being made in the work of extension at Western House Institution, Ware. This includes an Infirmary block of 80 beds, a new nurses' home, and casual wards. The new infirmary block will meet a pressing demand for infirmary beds in this part of the County. The work in connection with the extensions at Oster House, St. Albans, was commenced during the year. The chief feature of these improvements is the block which provides a maternity department on the first floor and a children's ward on the ground floor. This block will provide accommodation which has been urgently required in this part of the County.

Special Services.—In one or two of the Public Assistance Institutions special accommodation has been provided for the treatment of cases of tuberculosis. Under the Hertfordshire Public Assistance Scheme, 1929, it was provided that all cases of tuberculosis should receive institutional treatment under the Act under the heading of which the service is provided, namely

the Public Health (Tuberculosis) Act, 1921. Experience showed, however, that this was not practicable as it was impossible to do without the special beds in Public Assistance Institutions which were chiefly required for chronic ambulant and advanced cases, and who desired to be in an institution near their own homes. In order, therefore, to meet this difficulty and to regularize the existing position the Scheme has been amended, so that cases of tuberculosis can now receive institutional treatment either under the Public Health (Tuberculosis) Act, 1921, or under the Hertfordshire (Public Assistance) Scheme, 1929, made under the Local Government Act, 1929.

The work of the consulting medical staff of the County Institutions has proved to be of definite value in raising the standard of treatment in the Public Assistance Institutions in the County. Not only do the services of such a staff assist in clearing up cases of doubtful diagnosis but they open up new possibilities as regards special forms of treatment which may bring relief or even permanent benefit to some of the more chronic types of case.

EPIDEMIC DISEASES.

The death-rate from epidemic disease shows a slight increase from 0·10 to 0·16. The total number of deaths from epidemic disease for 1933 was 71 compared with 44 for 1932 ; there was an increase in both urban and rural districts.

TABLE 16.
DEATH-RATES FROM EPIDEMIC DISEASES.
(For each District see Fly-leaf at end of Report.)

	Hertfordshire.					
	Urban.		Rural.		County.	
	Rate.	Number.	Rate.	Number.	Rate.	Number.
1931	·12	34	·10	13	·11	47
1932	·10	30	·11	14	·10	44
1933	·17	50	·16	21	·16	71

The death-rate from epidemic disease was slightly higher in the urban districts, and the increase was more marked, than in the rural districts ; the highest rate reached was 1·0 (Sawbridgeworth). In four urban districts the death-rate was over 0·2 per 1,000 and in seven urban districts there were no deaths from epidemic disease. In the rural districts the highest rate was 1·0 (Watford) ; in eight rural districts there were no deaths.

TABLE 17.
INFECTIOUS DISEASES

New cases, returned by District Medical Officers of Health, in the year ending 31st December, 1933.

District. A	Civil Population, by Estimate 1933. B	COMMONLY NOTIFIABLE.								
		C Smallpox.	D Scarlet Fever.	E Diphtheria.	F Enteric Fever.	G Puerperal Fever.	H Erysipelas.	I Ophthalmia Neonatorum.	Tuber- culosis.	
									J Pulmon- ary.	K Non-Pul- monary.
URBAN.										
1. Baldock	3,365	—	3	—	—	—	—	—	3	2
2. Barnet.	16,020	—	32	27	—	2	19	1	20	6
3. Bishop's Stortford	10,160	—	57	1	—	—	1	—	12	1
4. Bushey	11,700	—	45	6	1	—	2	—	14	1
5. Cheshunt	15,180	—	39	6	1	—	5	1	11	—
6. Chorleywood	3,418	—	2	1	—	—	—	—	1	1
7. East Barnet Valley	20,360	—	41	3	—	—	3	—	24	4
8. Great Berkhamstead	8,452	—	35	—	—	—	—	—	13	—
9. Harpenden	9,113	—	4	12	—	—	2	—	6	6
10. Hemel Hempstead	15,520	—	76	12	—	2	8	—	23	2
11. Hertford	12,320	—	22	2	—	3	2	—	10	3
12. Hitchin	15,030	—	13	6	—	2	9	3	10	6
13. Hoddesdon	7,716	—	8	8	—	—	2	1	4	5
14. Letchworth	14,480	—	36	4	—	—	3	—	9	6
15. Rickmansworth	11,130	—	16	1	—	1	—	—	3	1
16. Royston	3,803	—	3	—	—	—	1	—	3	2
17. St. Albans	30,160	—	70	31	—	—	11	2	52	9
18. Sawbridgeworth	2,799	—	13	—	—	—	—	—	1	1
19. Stevenage	5,552	—	12	—	—	—	1	—	2	4
20. Tring	4,465	—	9	—	—	—	2	—	5	1
21. Ware	6,501	—	7	3	—	—	—	—	14	4
22. Watford	57,370	—	84	26	—	—	6	1	85	15
23. Welwyn Garden City	9,286	—	5	4	—	—	—	—	15	3
Total Urban	293,900	—	632	153	2	10	77	9	340	83
RURAL.										
1. Ashwell	3,515	—	2	—	—	—	—	—	—	—
2. Barnet	6,808	—	53	8	—	—	6	1	14	4
3. Berkhamstead	5,230	—	29	1	—	—	2	—	6	—
4. Buntingford	4,685	—	4	—	—	—	—	—	5	2
5. Hadham	5,497	—	6	—	—	—	—	1	10	2
6. Hatfield	12,400	—	6	1	—	—	4	—	17	2
7. Hemel Hempstead	8,640	—	8	6	—	—	2	—	17	5
8. Hertford	7,663	—	4	3	—	—	1	—	5	3
9. Hitchin	14,700	—	12	12	6	2	4	1	11	9
10. St. Albans	21,090	—	37	71	—	—	5	1	26	11
11. Ware	13,300	—	14	11	—	—	3	1	12	10
12. Watford	19,810	—	47	3	2	—	8	—	13	6
13. Welwyn	3,962	—	12	—	—	—	—	—	4	3
Total Rural	127,300	—	234	116	8	2	35	5	140	57
Total for County	421,200	—	866	269	10	12	112	14	480	140

Smallpox.—There were no cases of smallpox notified during the year compared with 3 last year.

Measles and Whooping-Cough.—The number of deaths from measles during the year was 4 compared with 8 last year. There were 24 deaths from whooping-cough compared with 26 last year, 18 in urban districts and 6 in rural districts. Of the 24 deaths 8 were under the age of twelve months compared with 15 last year.

Scarlet Fever.—There were 866 notifications of scarlet fever during the year compared with 602 notifications last year. There were 8 deaths from scarlet fever during the year, compared with 5 last year. Of the 8 deaths one was an adult female over the age of 75. The largest number of deaths (5) occurred in the 5–15 age group. Scarlet fever was fairly prevalent in the County during the year. Its chief centres were the urban districts of Bishop's Stortford, Bushey, Cheshunt, East Barnet Valley, Hemel Hempstead, Letchworth, St. Albans, and Watford, and the rural districts of Barnet, St. Alban's, and Watford.

Influenza.—The number of deaths from this disease was 210, compared with 125 during 1932. Of this number 154 occurred in urban districts and 56 in rural districts. In the urban districts the largest number of deaths (36) occurred amongst females over 75 years of age. The disease was again most fatal in old people, the total number of deaths in persons over the age of 65 being 100. Two deaths occurred under the age of twelve months compared with four last year.

Diphtheria.—There were 269 cases of diphtheria notified during the year compared with 235 in 1932, 153 in the urban districts and 116 in the rural districts. The highest number of notifications was received from St. Albans (31), Barnet (27), and Watford (26), and from the rural districts of St. Albans (71) and Hitchin (12). There were 22 deaths from diphtheria compared with 14 last year, 10 in urban districts and 12 in rural districts; all the deaths with one exception occurred in children under the age of fifteen. The largest number of deaths occurred in the St. Albans Rural District.

Enteric Fever and Paratyphoid Fever.—The total number of cases of enteric fever including typhoid and paratyphoid fever notified during the year was 20 compared with 25 last year; of this number, 10 were cases of enteric fever and 10 were cases of paratyphoid fever. Of the cases of typhoid fever,

two were notified from urban districts and 8 from rural districts. The largest number of cases of enteric fever notified in one district was 6 (Hitchin Rural). There were two deaths from enteric fever compared with 4 last year.

Undulant Fever.—There were no cases of undulant fever notified during the year.

Puerperal Fever.—There were 12 cases of puerperal fever notified during the year compared with 19 last year, 10 in urban districts and 2 in rural districts. Forty-three cases of puerperal pyrexia were notified compared with 47 last year, 37 in urban districts and 6 in rural districts. The largest number of cases of puerperal fever notified in urban districts was 3 (Hertford). The deaths from puerperal fever numbered 8, 7 in urban districts and 1 in rural districts compared with 7 last year.

Erysipelas.—There were 112 cases of erysipelas notified during the year, 77 in urban districts and 35 in rural districts, compared with 89 for the previous year, but no information is available regarding the actual number of deaths in the County from this cause. The largest number notified in the urban districts was 19 (Barnet) and 11 (St. Albans), and in the rural districts 8 (Watford) and 6 (Barnet).

Meningococcal Meningitis and Encephalitis Lethargica.—There were 10 notifications of meningococcal meningitis compared with 7 last year, all in the urban districts. There were 4 deaths from this disease compared with 7 last year. There were 4 notifications of encephalitis lethargica, all in urban districts, and there were 5 deaths from this disease, all in urban districts.

Poliomyelitis and Polioencephalitis.—There were 9 cases of poliomyelitis notified during the year; there was 1 death from this cause; there were 2 cases of polioencephalitis notified during the year.

Pneumonia and Broncho-pneumonia.—There were 264 cases of pneumonia, including influenzal pneumonia, notified during the year compared with 256 last year, the number of deaths from this cause being 225 compared with 241 last year. There were 163 deaths in urban districts and 62 in rural districts; the deaths in urban districts being increased but those in rural districts reduced. The largest number of deaths occurred in the female age group over 75 in urban districts, the next largest number being in the male age group 45–55 in urban districts. In rural districts the largest number of deaths also occurred in the female age group over 75.

Bronchitis—The number of deaths from bronchitis was 174, compared with 158 last year. The number of deaths in urban districts was 116 and in rural districts 58 compared with 107 and 51 last year. Of the total number of deaths from bronchitis 84 were males and 90 were females. There were 6 deaths from bronchitis under the age of twelve months compared with 8 last year. Of the total number of deaths from bronchitis 101 were over the age of 75.

Heart Disease.—There is an increase in the number of deaths from heart disease, which was 1,086 compared with 1,020 for 1932. Of the total number 760 were in urban and 326 in rural districts, and 536 were males and 550 were females. The largest number of deaths occurred in the female age group over 75 in urban districts. There were 47 deaths from heart disease under the age of 45.

Other Diseases.—The number of deaths from acute and chronic Bright's disease was 124 compared with 111 last year. The number of deaths from cerebral hæmorrhage was 229 compared with 256. The number of deaths from cirrhosis of the liver was 18 as compared with 13 last year. The deaths from appendicitis were 38 as compared with 34 last year. There were 56 deaths from diabetes during the year, 38 in urban districts and 18 in rural districts. Of the total number of deaths there were 35 in persons over the age of 65.

Other Notifiable Diseases.—During the year 3 cases of dysentery was notified compared with 1 last year. The number of cases of ophthalmia neonatorum notified during the year was 14, the same as last year.

ISOLATION HOSPITALS.

The County Council has prepared the following scheme for the provision of Hospital accommodation for the treatment of infectious disease in the County in pursuance of their powers under Section 63 of the Local Government Act, 1929 :—

ISOLATION HOSPITAL.

I. Infectious Diseases other than Smallpox.—(1) With a view to the provision of adequate hospital accommodation for the treatment of infectious diseases other than smallpox in the County of Hertford, the County shall be divided into areas consisting of the County Districts specified in the second column of the subjoined table, and there shall be provided

for each such area not less accommodation than that specified in the third column and placed opposite to the number and description of the area :—

(1)	(2)	(3)
<i>No of Area.</i>	<i>County Districts comprised in area</i>	<i>Suggested ul- timate accommo- dation in beds.</i>
i	Barnet U.D. East Barnet Valley U.D. Barnet R.D.	70
ii	Borough of Hemel Hempstead Great Berkhamstead U.D. Tring U.D. Berkhamstead R.D. Hemel Hempstead R.D.	60
iii	Borough of Hertford Bishop's Stortford U.D. Sawbridgeworth U.D. Ware U.D. Hoddesdon U.D. Cheshunt U.D. Hertford R.D. Ware R.D. Hadham R.D. (including Buntingford R.D.) Hatfield R.D.	80
iv	Baldock U.D. Hitchin U.D. Letchworth U.D. Royston U.D. Stevenage U.D. Hitchin R.D. (including Ashwell R.D.) Welwyn R.D.	60
v	Borough of St. Albans Harpenden U.D. Welwyn Garden City U.D. St. Albans R.D.	80
vi	Borough of Watford Bushey U.D. Chorleywood U.D. Rickmansworth U.D. Watford R.D.	100

(2) In Area No. i the additional accommodation rendered necessary by this scheme shall be provided by the Councils of the County Districts comprised in the area, either by arrangement with the Barnet Isolation Hospital Committee, or otherwise.

(3) In Areas Nos. ii to vi, inclusive, the accommodation rendered necessary by the provisions of this part of this scheme shall be provided by the Councils of the County Districts concerned, for which purpose they shall, as soon as may be, initiate action and carry through any proceedings that may be necessary on their part for forming united districts or altering the constitution of existing united districts as may be required pursuant to the provisions of Sections 279 and 297 of the Public Health Act, 1875, with a view to the formation of a Joint Hospital Board for each such united district.

(4) Every Authority maintaining a hospital in accordance with the provisions of this scheme shall, if in the opinion of the County Medical Officer of Health circumstances so require and accommodation is available, admit patients from districts within the County from which they are not, under the foregoing provisions of this scheme, required to receive patients, the terms of admission to be such as may be agreed between the Authorities concerned and approved by the County Council, or in default of agreement as may be determined by the County Council.

II. Smallpox. — (5) With a view to the provision of adequate hospital accommodation for the treatment of smallpox, the County Council, in pursuance of Sub-section (1) of Section 14 of the Local Government Act, 1929, shall provide a hospital or hospitals with a total minimum accommodation of 32 beds for the reception of persons suffering from smallpox who are inhabitants of the County, and the expenses incurred by the County Council in this connection shall be defrayed as expenses for general County purposes.

BACTERIOLOGICAL EXAMINATIONS.

The arrangements made with the laboratory at Hill End Mental Hospital for the bacteriological examination of sputum and other specimens have worked well during the year. In the following summary (for which I am indebted to Dr. Kimber) particulars are given of the work carried out at the laboratory during the year for the County Council, Local Authorities, and Hospitals.

Summary of work undertaken for the County Medical Officer of Health and other outside authorities :—

Urines : T.B. 8 ; microscopy 17 ; microscopy and culture 68 ; microscopy, culture, and T.B. 22 ; urea 54 ; sugar percentage 2 ; animal inoculation 2 ; diastase 1. Blood : W.B.C. and differential 9 ; full count 54 ; hæmoglobin, R.B.C., C.I., and W.B.C. 23 ; differential 2 ; culture 15 ; sugar 30 ; urea 51 ; W.R. 69 ; widal 23 ; calcium 2 ; Van den Berg 1 ; N.P.N. 1. Pleural Fluid : T.B. and culture 17 ; T.B. 2 ; C.S.F. : routine 2 ; culture 10. Pus : 20. Sputa : T.B. 1,096 ; other organisms 3 ; asbestos bodies 1. Test-meals : 4. Throat swabs : K.L.B. 406 ; hæmolytic strepts 122. Nasal swabs : K.L.B. 63 ; hæmolytic strepts 7. Cervical swabs : culture 21. Cervical smears : G.c., etc. 23. Hairs : ringworm 2. Sections : 17. Milk : grade " A " 74 ; certified 3 ; pasteurized 2 ; T.B. 80 ; animal inoculation 4 ; abortus 1. Fæces : T.B. 4 ; culture 5 ; blood 4 ; microscopy 2. Water : chemical 27 ; bacteriological 20. Bile : 1. Cows' blood : agglutination 2. Testicle fluid : culture 1. Eye discharge : culture 1. Fluid : culture ankle joint 2. Tinned tongue : culture 1. Pus from pig's throat : T.B. 1. Ear swabs : K.L.B. 2.

Sputa percentage positive 20 per cent.

K.L.B. percentage positive 17·7 per cent.

Grade " A " milk : 82 per cent conformed to the standard.

Swabs positive for hæmolytic strepts 17 per cent.

The work done for outside authorities has shown a steady increase, especially in the number of diphtheria swabs and water samples examined on behalf of Local Authorities, whose co-operation in the work of the laboratory is requested.

PUBLIC VACCINATION.

The service in connection with Public Vaccination continues on lines similar to what has been referred to in previous reports. The number of persons vaccinated is a steadily decreasing one except when cases of small-pox occur.

The total number of vaccinations during the year was 1,709 compared with 1,835 last year.

The duties of Public Vaccinators are laid down in the Vaccination Order, 1930, and the instructions to these officers are given in the Fourth Schedule of the Order. Every Public Vaccinator may be appointed on such terms and conditions of service as the County Council may think proper. The officers are paid according to a scale of fees, but in one district the remuneration consists of an annual salary. A

uniform scale of fees has been adopted by the County Council for all appointments of public vaccinators as from 1st April, 1930.

As regards the number of vaccinations carried out, the following figures refer to the twelve months ending 31st December, 1933 :—

Primary Vaccinations	.		1,490
Revaccinations	.	.	219
Total	.	.	1,709

Of the primary vaccinations, 1,271 were under one year of age, and 219 were one year and upwards. The largest number of primary vaccinations during the period stated was carried out in the following districts : Barnet (233), St. Albans (141), Watford (96), Cheshunt (91). The largest number of revaccinations was carried out in Hertford (113), where the boys of Dr. Barnardo's Home were re-vaccinated.

NURSING HOMES.

The Nursing Homes Registration Act, 1927, provides for the registration and inspection of nursing homes and it is an offence under the Act for any person to carry on a nursing home without being duly registered. Application for registration has to be made to the local supervising authority and has to be accompanied by a fee of five shillings. The authority may refuse to register an applicant if they are satisfied (a) that he or any person employed by him is not a fit person to carry on or be employed at a nursing home ; (b) that the premises are not fit to be used for a nursing home owing to situation, construction, accommodation, staffing or equipment, or that the premises are used in a way unsuitable or undesirable in the case of a nursing home ; and (c) that the conditions laid down in the Act as to the qualifications of those in charge of nursing homes and maternity homes are not being complied with.

A nursing home is defined under the Act as any premises used or intended to be used for the reception of and the providing of nursing for persons suffering from any sickness, injury or infirmity, and includes a maternity home ; it does not include (a) any hospital or premises maintained or controlled by a Government department or local authority or any other body of persons constituted by Special Act of Parliament or incorporated by Royal Charter ; (b) any institution for lunatics within the meaning of the Lunacy Act, 1890 ; and (c) any certified institution, certified house or

approved home within the meaning of the Mental Deficiency Act, 1913.

The County Council has made by-laws under the Act with respect to nursing homes in the County.

There are at the present time 42 nursing homes in the County registered under the Act. Many of them are small homes which provide accommodation chiefly for patients of the chronic type. These serve a very useful purpose as they meet the requirements of senile and chronic cases, the care and supervision of which it is difficult to carry out under the ordinary conditions of home life. Mixed homes usually have one or two maternity beds, and in such homes special care has to be exercised to provide that no infection is conveyed. Those in charge of these homes are usually fully alive to the necessity for adequate precautions and they are always quite prepared to carry out any special instructions given with this end in view.

MATERNITY AND CHILD WELFARE.

The infant mortality for the year was 42, compared with 50 last year and this definite fall is due to a decrease in the number of deaths from congenital debility and premature birth which must be attributed to the efforts which are being made to promote the health and well-being of mothers and infants. Comparison with previous years shows the marked reduction which has taken place in infant mortality; thus, for the years 1900 and 1901 the infant mortality in the County was respectively 112 and 103, whereas for the years 1932 and 1933 the corresponding rates were 50 and 42.

The scheme of Maternity and Child Welfare in the County includes both official and voluntary effort, and is summarized as follows :—(1) Thirteen County Council Maternity and Child Welfare Centres, at which consultations are held, infants are weighed, and instruction and advice are given to nursing and expectant mothers; in addition, also, a considerable amount of voluntary work is undertaken in various directions by ladies who are interested in the work of the Centres; (2) 8 special ante-natal clinics at Barnet, Berkhamstead, East Barnet, Hertford, Hitchin, Letchworth, Tring, and Waltham Cross; ante-natal clinics are also held at the remaining 5 Centres; (3) 31 Voluntary Maternity and Child Welfare Centres; (4) 11 Weighing Centres; (5) provision of maternity beds in four districts in the County, namely, Hertford, Hitchin, Hemel Hempstead, and Watford; (6) Convalescent Home at St. Leonards; (7) attendance at

TABLE 18.
GIVING PARTICULARS OF ATTENDANCES AT VOLUNTARY WEIGHING
CENTRES DURING 1933.

Centre.	No of Times Centre Open.	No. of Mothers Attending.	No. of Children Attend- ing Centre during 1933 for first time, and who were:— (a) Under 1 year.	(b) between 1 and 5 years.	No. of Children who attended Centre and who, at the end of the year were:— (a) Under 1 year.	(b) Between 1 and 5 years.	No. of Attendances at Centre by Children.— (a) Under 1 year.	(b) Between 1 and 5 years.	Total Children's Attendances.	Average Attendance of Children.	No. of Deaths of Children.	No. of Children who had Orthopaedic Treatment.	No. of Talks given at Centre.
Buntingford	50	43	33	33	16	50	259	233	492	9.8	—	3	2
Bushey	44	107	58	13	48	107	903	739	1642	37.3	1	—	—
Croxley Green	11	44	21	—	16	30	139	88	227	20.6	—	—	11
Great and Little Amwell	9	10	5	—	4	11	20	24	44	4.9	—	—	—
High Cross	12	45	10	19	5	53	62	218	280	23.3	1	1	—
King's Walden	44	29	2	3	1	36	130	453	583	13.3	—	—	—
St. Albans (The Camp)	26	80	20	1	18	75	241	383	624	24.0	1	1	—
St. Albans (St. Johns)	25	63	15	4	15	55	166	354	520	20.8	—	4	—
Stanstead Abbots	21	36	13	5	10	37	134	121	255	12.1	—	—	—
Weston	8	24	5	1	2	32	29	144	173	21.6	—	—	—
Wheathampstead	20	46	19	6	13	42	126	161	287	14.4	2	1	2
Total	270	527	201	85	148	528	2209	2918	5127	19.0	5	10	15

orthopædic and massage clinics and dental clinics ; (8) the provision of hospital treatment for orthopaedic cases, infantile diarrhoea and ophthalmia neonatorum ; (9) health visiting ; (10) the granting of milk free or at half cost to necessitous mothers and young children on a medical certificate ; and (11) arrangements for the hospital treatment of cases of notifiable puerperal fever in approved institutions. Additional arrangements have also been made under the Public Health (Notification of Puerperal Fever and Puerperal Pyrexia) Regulations for consultation with an obstetric specialist, for skilled nursing and for necessary bacteriological examinations in cases of puerperal pyrexia and sepsis.

Voluntary Centres.—There are now 31 voluntary centres and 11 weighing centres in the County compared with 30 and 9 respectively last year. These centres have for the most part been established in rural districts by the District Nursing Associations and they provide for the care and supervision of expectant mothers, nursing mothers, and young children in these districts. The work carried out in connection with these centres, at which the local medical practitioner frequently attends is invaluable and reflects much credit on those who have been instrumental in establishing them.

In the accompanying tables particulars are given of the work carried out at the voluntary centres and weighing centres.

Maternity Beds.—Accommodation for maternity cases is provided at the Watford Maternity Home (21 beds), West Herts Hospital (8 beds), the Maples, Hitchin (7 beds), and the County Hospital, Hertford (6 beds). In addition there are a number of beds provided in the various County Institutions. There is an excellent maternity unit at the Wellhouse Hospital, Barnet. Arrangements are also made for the admission of complicated maternity cases to the Addenbrooke's Hospital, Cambridge from the northern part of the County. Maternity beds are now available at the Bishop's Stortford voluntary hospital ; and additional maternity beds to the number of 15 are being provided at Oster House, St. Albans.

Consultations.—Mr. Ellison, the consulting obstetrical surgeon, reports as follows regarding his work during the year :—

In all 41 visits were paid to patients during 1933. Thirty-three visits were made to patients before or during delivery. Nine were cases of disproportion in which Cæsarian Section was performed in 7 instances. Three were cases of placenta previa in one of which Cæsarian Section was performed, and in another where the child had already died craniotomy and extraction

TABLE 19.

GIVING PARTICULARS OF ATTENDANCES AT VOLUNTARY MATERNITY AND CHILD WELFARE CENTRES AND ANTE-NATAL CLINICS DURING 1933.

Centres.	No. of times Centre open.	No. of mothers attending.	No. of children attending Centre for first time and who on their first attendance were:—	(a) Under 1 year.	(b) Between 1 and 5 years.	Total CHILDREN'S ATTENDANCES.	Average attendance of children.	No. of deaths of children.	No. of children who had orthopaedic treatment.	No. of infant consultations.	No. of mothers' consultations.	No. of talks given at Centre.	No. of times Ante-Natal Clinic open.	No. of expectant mothers attending.	No. of expectant mothers by average attendance of expectant mothers per session.	No. of ante-natal consultations.	No. of doctors' attendances at Infant Welfare Centre and Ante-Natal Clinic.
Aldbury	22	24	5	37	158	195	8.9	—	—	15	—	3	—	—	—	—	9
Apsley End	23	62	32	118	282	400	17.4	—	—	154	27	21	50	—	—	—	23
Baldock	50	87	39	435	801	1,236	24.7	—	—	596	9	—	—	19	0.7	37	50
Boreham Wood	23	152	60	629	823	1,452	63.1	—	—	234	40	—	—	15	3.3	36	12
Chipperfield	23	83	27	357	572	929	40.4	—	6	411	—	22	11	—	—	—	34
Chorleywood	22	39	8	125	349	474	21.6	—	—	474	—	22	—	—	—	—	22
Colney Heath	23	77	32	223	484	707	30.7	1	—	110	—	—	12	19	4.5	49	12
Harpenden	32	229	82	982	1,376	2,358	73.7	—	17	659	8	—	12	100	17.8	214	44
Hoddesdon	50	202	66	1,182	936	2,118	42.4	—	37	577	2	8	12	63	15.9	191	36
Kimpton	25	43	16	153	328	481	19.2	1	—	21	4	4	3	20	3.0	36	12
King's Langley	12	66	18	164	355	519	43.3	—	—	521	8	—	12	7	2.0	6	12
Knebworth	45	50	19	393	620	1,013	22.5	—	—	198	2	—	12	—	1.3	15	10
Langleybury	22	41	19	133	145	278	12.6	—	—	51	—	2	—	—	—	—	5
London Colney	20	51	22	278	315	593	29.7	—	—	64	10	—	12	6	—	—	21
North Mymms	22	50	15	215	276	491	22.3	1	—	123	3	—	—	—	0.8	10	9
Potten End	11	27	12	51	137	188	17.1	—	—	13	1	—	—	—	—	—	3
Little Gaddesden	10	13	4	30	44	74	7.4	—	—	7	—	—	—	—	—	—	1
Radlett	24	109	44	435	489	924	38.5	—	—	437	—	14	24	7	0.5	11	24
Redbourn	24	45	21	206	203	409	17.0	—	1	34	—	—	—	—	—	—	11
Rickmansworth	21	88	38	213	217	430	20.5	1	2	117	—	—	12	4	0.3	4	11
Royston	24	20	7	119	205	324	13.5	—	—	124	—	—	—	1	—	—	12
Tewin and Datchworth	24	46	7	72	295	367	15.3	—	—	65	18	—	2	3	1.5	3	12
Ware	47	168	35	822	1,231	2,053	43.7	4	3	426	41	2	23	95	12.3	282	46
Watton	10	22	8	61	86	147	14.7	1	—	98	—	—	—	—	—	—	9
Welwyn	51	80	33	592	694	1,287	25.2	—	—	509	172	—	12	40	8.9	107	36
Codicote	42	41	13	212	240	452	10.8	—	—	65	15	—	12	19	3.4	11	11
Woolmer Green	24	27	7	124	180	304	12.7	—	—	56	19	—	1	1	1.0	1	8
Welwyn Garden City (Pear-tree)	51	266	90	1,566	1,188	2,754	54.0	—	7	1,034	20	12	12	57	11.0	132	63
Welwyn Garden City (Lawrence Hall)	51	228	33	973	972	1,945	38.1	—	13	864	9	12	12	34	6.8	81	63
Wigginton	12	22	5	33	185	218	18.2	—	1	26	—	—	—	3	—	—	12
Watford Home	—	—	—	—	—	—	—	—	—	—	—	—	52	54	1.8	70	52
Totals	840	2,458	817	10,933	14,186	25,119	29.9	9	87	8,083	408	125	298	569	4.6	1,296	685

were performed to save the mother's life. Cæsarian Section was also performed in 2 cases of albumenuria, one of inertia, one breech presentation with extended legs in an elderly primipara, and in one case for repeated intra-uterine death of the child for no obvious reason, a live child being delivered this time. Three were cases of toxæmia one of which was complicated by fibroids necessitating a subtotal hysterectomy. In all 13 cases were submitted to Cæsarian Section and in all cases where a living child could have been delivered both mother and child made satisfactory progress.

Eight visits were to patients during the puerperium. Seven of these were suffering from infections ; 4 had been delivered at full term by a midwife in their own home, 1 was a B.B.A., and 1 was delivered in the Watford Maternity Home for manual removal of the placenta. Three of these cases died. One patient seen during the puerperium was suffering from sarcoma of the isthium and was moved to a London Hospital.

Massage and Orthopædic Centres.—During the year 1933 the number of defects and morbid conditions found in children under 5 years of age who attended and received treatment at the massage and orthopædic centres in the County was 158.

Dental Treatment.—The treatment carried out during the year in the case of mothers and in children under 5 years of age is shown as follows :—

Mothers and children inspected by the Dentists	487
Found to require treatment	481
Actually treated.	462
Attendances made for treatment	605
Fillings	9
Extractions	1,610
Administrations of general anæsthetic for extractions	439
Other operations	5

DR. SWATMAN'S REPORT.

During the year 1933 Maternity and Child Welfare Centres have been held as previously at Bishop's Stortford, Hatfield, Hitchin, Letchworth, St. Albans, and Stevenage. Morning ante-natal clinics have been held weekly at Hitchin, and at bi-monthly intervals at Letchworth and St. Albans. At the other Centres the ante-natal clinic has been held at the same session as the Infant Welfare.

TABLE 20.

GIVING PARTICULARS OF CHILDREN UNDER 5 YEARS OLD WHO ATTENDED THE CENTRES IN 1933 COMPARED WITH THOSE IN 1932. (Dr. Swatman's District.)

Centre.	No. of times the Centre was open in		No. of children on the books in		No. of attendances of children in		Average weekly attendance of children in		No. of deaths of children in		No. of children who had Orthopædic treatment in		No. of children referred to Dental Clinic in		No. of Nursing Mothers referred to the Dental Clinic in		No. of defects and ailments in	
	1933.	1932.	1933.	1932.	1933.	1932.	1933.	1932.	1933.	1932.	1933.	1932.	1933.	1932.	1933.	1932.	1933.	1932.
Bishop's Stortford	49	50	146	144	2,407	2,429	50	48	1	5	8	4	9	10	6	5	39	85
Hatfield .	46	45	128	135	1,006	820	22	21	—	1	6	4	—	2	—	—	37	78
Hitchin .	48	48	365	381	3,289	3,277	69	69	2	3	22	11	10	21	2	3	121	301
Letchworth .	52	52	336	377	3,417	3,743	70	72	2	1	14	12	10	16	5	5	110	301
St. Albans .	51	51	640	595	4,921	4,327	99	83	5	2	—	30	84	61	10	4	230	487
Stevenage .	46	45	163	196	1,290	1,573	28	35	2	3	6	6	21	25	4	6	67	170
	292	291	1,778	1,828	16,330	16,169	338	328	12	15	56	67	134	135	27	23	604	1422

TABLE 2I.
GIVING PARTICULARS OF EXPECTANT MOTHERS WHO ATTENDED THE ANTE-NATAL CLINICS IN 1933 COMPARED WITH THOSE IN 1932. (Dr. Swatman's District.)

Ante-Natal Clinic.	No. of times clinic opened in		No. of expectant mothers on books in		No. of consultations of these with Medical Officer in		Average number of consultations of expectant mothers in		No. of deaths amongst expectant mothers in		No. of expectant mothers referred to Dental Clinic in		No. of post-natal consultations in		Normal expectant mothers in 1933.		Expectant mothers with abnormal conditions dependent on pregnancy in 1933.		Expectant mothers with abnormal conditions not dependent on pregnancy in 1933.		Percentage of normal confinements in	
	1933.	1932.	1933.	1932.	1933.	1932.	1933.	1932.	1933.	1932.	1933.	1932.	1933.	1932.	Normal confinement.	Abnormal confinement.	Normal confinement.	Abnormal confinement.	Normal confinement.	Abnormal confinement.	1933.	1932.
Bishop's Stortford	19	23	14	10	37	23	2	2	—	—	1	2	28	24	—	—	9	1	3	1	90	88
Hatfield . . .	20	22	32	32	89	77	4	4	—	—	3	—	24	20	6	—	9	1	13	1	90	95
Hitchin . . .	48	48	240	204	790	614	17	16	—	—	5	2	100	98	30	6	71	23	82	22	75	72
Letchworth . . .	23	24	41	25	116	128	5	3	—	—	—	1	69	55	8	—	5	1	20	2	90	93
St. Albans . . .	23	52	91	89	241	195	11	5	—	—	4	3	90	64	24	1	18	4	44	5	90	90
Stevenage. . .	34	32	28	30	65	43	2	2	—	—	—	6	72	27	1	1	—	2	14	5	80	72
	167	201	446	390	1338	1080	41	32	—	—	13	14	383	288	69	8	112	32	176	36	82	90

The number of children and mothers attending the centres has been well maintained. So that there is only a slight variation in the figures from those in 1932.

The number of individual children (1,778) on the register was slightly smaller, but the number of their attendances (16,330) was larger, and the average weekly number of attendances of children at the centres as a whole was increased from 55 to 57.

The general health of the children has been good, and the number of defects and ailments amongst them was less by one-half. Amongst the children who attended there were 12 deaths; the various causes of which were prematurity, broncho-pneumonia, pneumonia and whooping-cough, marasmus (syphilitic), convulsions, enteritis, and intussusception.

At the Ante-natal Clinics (considered as a whole) the work has increased very considerably. The attendances at these were larger by one-third than in 1932. During the year 446 expectant mothers attended the clinics, and there were 1,338 consultations. Of these mothers 75 per cent were found to be suffering from some abnormal condition; 14 per cent had abnormal confinements, but all made a good recovery. There were no maternal deaths.

DR. ORNSTEIN'S REPORT.

The same sessions, both at the Ante-natal Clinics and the Child Welfare Centres, were again held during the year, which saw the transference of the Ware Centre to more convenient premises.

There was a slight decrease in the number and attendances of expectant mothers. In view of a steadily diminishing birth-rate, this was not unexpected. The post-natal figures rose again during the year, the number being 108.

There were three deaths amongst the expectant mothers, due to sepsis, pulmonary embolus, and an abdominal tumour complicating pregnancy.

The attendances at the Child Welfare Centres were well maintained. Eleven deaths occurred amongst the children attending the Centres. Five of these were due to pneumonia, two to whooping-cough, one to convulsions, two were accidental, and one was due to a rare condition of the muscular system.

The figures relating to the Centres are given in the tables.

TABLE 22
GIVING PARTICULARS OF EXPECTANT MOTHERS WHO ATTENDED THE ANTE-NATAL CLINICS IN 1933,
COMPARED WITH THOSE OF 1932. (Dr. Ornstein's District.)

Ante-Natal Clinic.	No. of times Clinic opened in		No. of expectant mothers on books in		No. of consultations of these with Medical Officer in		Average number of consultations of expectant mothers in		No. of deaths amongst expectant mothers in		No. of expectant mothers referred to Dental Clinics in 1933.	No. of post-natal consultations in		Normal expectant mothers in 1933.		Expectant mothers with abnormal conditions dependent on pregnancy in 1933.		Expectant mothers with abnormal conditions not dependent on pregnancy in 1933.	Percentage of normal confinements in	
	1933.	1932.	1933.	1932.	1933.	1932.	1933.	1932.	1933.	1932.		Normal confinement.	Abnormal confinement.	1933.	1932.	Normal confinement.	Abnormal confinement.		1933.	1932.
Barnet	24	22	62	69	192	235	8	11	—	5	6	9	30	4	—	1	2	1	84	90
Berkhampstead	22	22	55	77	190	229	9	10	—	—	11	1	50	3	—	—	2	—	95	93
East and New Barnet	22	23	108	109	391	386	18	17	—	11	55	32	70	15	—	—	—	—	82	88
Hemel Hempstead	48	48	19	28	71	91	1	2	—	—	13	17	14	1	—	—	—	—	93	90
Hertford	49	50	85	92	343	382	7	8	2	11	2	18	57	8	—	—	2	2	86	88
Tring	23	23	48	54	181	211	8	9	—	—	11	10	30	8	—	—	1	1	78	65
Waltham Cross	24	26	68	69	225	196	9	8	1	4	1	2	51	3	—	1	1	—	93	90
Ware Voluntary Centre	23	26	95	99	282	288	12	11	—	4	9	3	59	8	—	3	3	—	85	90
	235	240	540	597	1875	2018	8	8	3	35	108	92	361	50	—	5	11	4	86	

TABLE 23.

GIVING PARTICULARS OF CHILDREN UNDER 5 YEARS OF AGE WHO ATTENDED THE CENTRES IN 1933
 COMPARED WITH THOSE IN 1932. (Dr. Ornstein's District.)

Centre.	No. of times the Centre was opened in		No. of children on the books in		No. of attendances of children in		Average weekly attendance of children in		No. of deaths of children in		No. of children who had orthopaedic treatment in		No. of children referred to Den- tal Clinics in		No. of nursing mothers referred to Den- tal Clinics in		No. of defects and ailments in	
	1933.	1932.	1933.	1932.	1933.	1932.	1933.	1932.	1933.	1932.	1933.	1932.	1933.	1932.	1933.	1932.	1933.	1932.
Barnet	48	48	362	330	3,123	2,634	65	55	1	—	—	—	26	7	75	74		
Hemel Hempstead	51	51	209	244	1,637	1,367	32	27	4	4	1	—	—	—	19	44		
Hertford	51	52	320	322	2,473	3,069	48	57	1	2	1	8	1	1	75	71		
Waltham Cross	50	51	340	379	2,938	3,208	59	63	1	2	1	14	1	1	35	39		
Ware Voluntary Centre	47	47	264	266	2,053	1,839	44	39	4	2	—	8	3	3	33	29		
Total	247	249	1,495	1,541	12,224	12,157	49	49	11	10	3	56	12	12	237	257		

TABLE 24.

GIVING PARTICULARS OF CHILDREN UNDER 5 YEARS OLD WHO ATTENDED THE CENTRES IN 1933 COMPARED WITH THOSE IN 1932. (Dr. Sparrow's District.)

Centre.	No. of times the Centre was open in		No. of children on the books in		No. of attendances of children in		Average weekly attendance of children in		No. of deaths of children in		No. of children who had Orthopædic treatment in 1933.	No. of children referred to Dental Clinic in 1933.	No. of Nursing Mothers referred to the Dental Clinics in 1933.	No. of Defects and Ailments in	
	1933.	1932.	1933.	1932.	1933.	1932.	1933.	1932.	1933.	1932.				1933.	1932.
Berkhamsted.	49	50	245	230	2,202	1,856	45	37	1	2	1	19	0	13 defects in 30 patients	21 defects in 37 patients.
Tring . . .	46	47	148	168	1,836	1,728	40	36·76	1	1	1	0	0	18 among 38 patients	16 varieties in 22 children.

HEALTH VISITORS, NURSES, AND MIDWIVES.

The work of the district nurse in connection with various public health services increases from year to year in scope and responsibility. The local nurse is frequently the first person who is called to a case of sudden illness or accident and she has to rely on her own resourcefulness until medical assistance is obtained. In addition there is the routine work in connection with the various health services which makes a considerable demand on time and effort. It is essential, therefore, that the village nurse should be highly trained and experienced and it is for this reason that special lectures are provided by the County Council. These lectures have been continued during the year and have been much appreciated.

The standard of work of the district nurses in regard to midwifery, sick nursing, and special services is satisfactory, and the majority of them show a commendable keenness to increase their knowledge and capability. One is impressed by the excellence of some of the reports which are submitted from time to time ; they show a true appreciation of the importance of their duties and of the value of thoroughness.

In the following report Miss Harrington, the County Health Visitor, Inspector of Midwives, and County Superintendent of Nurses, gives full particulars of the work of the health visitors, nurses, and midwives during the year.

ANNUAL REPORT OF THE INSPECTOR OF MIDWIVES AND INSPECTOR OF HEALTH VISITORS FOR THE YEAR 1933.

During the year 1933 the health visiting work has been carried out by the 111 Health Visitors, including three whole-time County Council Nurses. Of the 4,806 babies born alive during 1933 (excluding Watford Urban District) 4,125 have been visited by the Health Visitors, a percentage of 85·8 per cent.

Of the babies visited, 94 died before reaching the age of one year, showing a mortality of 22·8 per 1,000 ; 724 babies left the County before completing their first year. In all cases

where the address could be obtained it was forwarded to the local Health Authority.

From the Health Visitors' returns it is shown that 2,410 or 58·4 per cent of the infants were breast-fed. 1,129 or 27·4 per cent were partly breast-fed, and 473 or 11·5 per cent were bottle-fed, 874 or 21·2 per cent used dummies, 1,105 or 26·8 per cent were vaccinated, and 3,094 or 75·0 per cent were up to the average weight.

STATEMENT OF WORK AS INSPECTOR OF MIDWIVES AND HEALTH VISITORS FOR THE YEAR 1933.

Inspection of Midwives and Special Visits	1,677
Visits to Health Visitors, Nurses, and Doctors	970
Attendances at Committee Meetings	92
Attendances at County Council and Voluntary Infant Welfare Centres and Schools	284
Letters, Circulars, etc., under Midwifery Act and Notification of Births Act 13,069	

STATISTICS OF MIDWIVES PRACTISING IN THE COUNTY.

There were 220 trained midwives practising in the County on the 1st January, 1934. In addition, there were 61 temporary midwives and 33 who have left or retired, making a total of 314 practising in 1933. Of those in practice on 1st January, 1934, 40 are in private practice and 138 work for Nursing Associations. Four are employed by the County Council and 38 in Institutions.

In 1933 the total number of births was 5,735, excluding still-births. The midwives attended 4,767 cases. Of these 1,778 were with a doctor engaged and included 52 or 2·9 per cent stillbirths; 2,989 were attended by the midwives alone and included 43 or 1·4 per cent stillbirths.

The number of infants who died before the tenth day was 35 in midwives' cases born alive, being a mortality of 11·8 per 1,000. Of the 35 infants who died before the tenth day, 19 were premature. In addition to these cases, the midwives attended 141 abortions with a doctor.

The number of expectant mothers who have attended ante-natal clinics was 1,451. The number of ante-natal visits paid by the midwives was 17,708.

The number of medical aid notices was 796 or 26·6 per cent.

In the 2,989 cases attended by the midwives, there were 3 maternal deaths, or 1·0 per 1,000.

TABLE 25.

TABLE OF HEALTH VISITORS' WORK CARRIED OUT UNDER THE NOTIFICATION OF BIRTHS ACT, 1907-1915.

District and Health Visitors.	Parishes in each District.	Population Covered.	No. of New Homes Visited.	No. of Babies under Supervision, 31st Dec., 1933.	Health Visits to Mothers and Babies.	Health Visitors' Attendances at Maternity Centre.	No. of Cases as Midwife and Maternity Nurse and Visits.	No. of Children aged 1-5, under Supervision 31st Dec., 1933.	Visits to These.
No. 1 : Miss Milner .	Barnet, Arkley, Totteridge .	16,020	163	116	1,145	45		487	1,629
No. 2 : Miss Shore .	Tring Urban District .	4,465	49	51	702	43	38 cases 726 visits	170	917
No. 3 : Miss Wells .	Letchworth and Willian .	14,690	120	150	1,431	40		459	1,783
Nurses working under the County Nursing Association.		295,793	3,793	4,361	65,498	2,325		13,325	75,222
	Total	330,968	4,125	4,678	68,776	2,453		14,441	79,551

TABLE 26.

MIDWIVES AND THEIR WORK FOR THE YEAR 1933.

DISTRICT.	POPULATION.	TOTAL BIRTHS.		BIRTHS ATTENDED BY MIDWIVES.		INFANTS' DEATHS			NOTIFICATIONS.				MATERNAL DEATHS FOR WHOLE COUNTY. MIDWIVES.	NUMBER OF MIDWIVES.				
						Under one Year.	Rate per 1,000.	Midwives' cases under Ten Days.	Medical Aid.		Stillbirths.			Private.	Nursing Associations.	County Council.	Institutions.	
		Legitimate.	Illegitimate.	Midwife.	With Doctor.				Mother.	Child.	With Doctor.	Midwife.						
Urban.																		
1. Baldock	3,365	53	3	26	27	5	89·2	1	9	4	2	..	..	..	1	..	..	
2. Barnet	16,020	188	8	91	47	11	56·1	..	8	3	3	..	..	3	1	..	10	
3. Berkhamstead	8,452	111	..	81	29	2	18·0	1	11	..	..	1	..	1	3	..	..	
4. Bp's. Stortford	10,160	129	9	62	72	5	36·2	1	14	2	..	1	..	..	4	..	3	
5. Bushey	11,700	130	4	68	19	9	67·1	3	6	4	..	2	..	2	1	..	..	
6. Cheshunt	15,180	211	11	64	88	12	54·0	1	13	3	1	1	..	3	5	..	..	
7. Chorleywood...	3,418	25	..	10	8	2	80·0	..	5	1	..	1	..	..	1	..	..	
8. E. Barnet Valley	20,360	276	12	153	45	14	48·6	1	20	5	2	..	..	1	4	..	..	
9. Harpenden	9,113	91	7	68	28	4	40·8	1	29	1	2	..	..	..	4	..	1	
10. H. Hempstead	15,520	202	5	132	63	7	33·8	2	32	2	1	1	..	1	3	..	5	
11. Hertford	12,320	175	1	116	44	9	51·1	3	25	8	..	1	..	..	5	..	4	
12. Hitchin	15,030	196	14	101	101	18	85·7	4	56	7	1	1	1	3	2	3	3	
13. Hoddesdon	7,716	117	3	83	36	3	25·0	..	22	5	1	..	..	2	3	..	..	
14. Letchworth	14,480	162	5	74	84	5	29·9	1	12	2	2	..	..	5	2	..	..	
15. Rickmansworth	11,130	177	10	121	38	12	64·1	2	12	6	3	3	..	2	3	..	..	
16. Royston	3,803	30	..	16	7	..	..	..	1	1	..	..	..	..	1	..	1	
17. St. Albans	30,160	367	23	230	146	9	23·0	..	29	3	3	7	..	3	10	..	6	
18. Sawbridgeworth	2,799	47	2	15	33	1	20·4	..	6	..	1	..	..	..	2	..	..	
19. Stevenage	5,552	63	..	34	27	1	14·7	..	8	1	..	..	..	..	2	..	..	
20. Tring	4,465	60	2	18	25	4	64·5	1	2	1	..	..	..	..	..	1	..	
21. Ware	6,501	99	1	68	24	6	60·0	1	13	3	2	1	..	..	3	..	1	
22. Watford	57,370	775	34	500	212	36	44·4	6	178	16	12	8	1	5	13	..	3	
23. Welwyn G'n C.	9,286	169	1	60	71	4	23·5	..	11	2	4	1	..	..	4	..	1	
Total for U.D's. ...	293,900	3,858	155	2,191	1,274	179	44·6	29	522	80	40	29	2	31	77	4	38	
Rural.																		
1. Ashwell	3,515	49	3	23	28	4	76·9	..	10	3	..	..	..	1	3	..	..	
2. Barnet	6,808	123	2	73	28	8	64·0	1	5	2	..	..	..	1	3	..	..	
3. Berkhamstead	5,230	62	3	37	10	..	..	..	4	1	..	1	..	..	4	..	..	
4. Buntingford	4,685	61	2	20	18	5	79·3	..	9	2	2	..	..	..	1	..	..	
5. Hadham	5,497	59	4	20	27	5	79·3	1	7	4	..	..	..	..	3	..	..	
6. Hatfield	12,400	186	5	70	61	4	20·9	1	7	2	4	2	..	1	5	..	..	
7. H. Hempstead	8,640	119	4	70	51	5	40·6	2	4	..	2	..	..	2	6	..	..	
8. Hertford... ..	7,663	80	1	42	21	4	49·3	..	6	1	..	..	..	..	5	..	..	
9. Hitchin... ..	14,500	183	2	107	52	7	37·8	1	37	6	2	6	1	1	8	..	..	
10. St. Albans	21,090	251	14	108	48	8	30·1	..	24	..	1	1	..	1	6	..	..	
11. Ware	13,300	177	3	94	67	7	38·8	..	27	4	..	2	..	1	9	..	..	
12. Watford	19,810	267	7	113	82	7	25·5	..	19	3	..	2	..	1	7	..	..	
13. Welwyn	3,962	53	2	21	11	..	..	..	6	1	1	..	..	..	1	..	..	
Total for R.D's. ...	127,300	1,670	52	798	504	64	37·1	6	165	29	12	14	1	9	61	..	..	
Total for U.D's. ...	293,900	3,858	155	2,191	1,274	179	44·6	29	522	80	40	29	2	31	77	4	38	
Total for County	421,200	5,528	207	2,989	1,778	243	42·3	35	687	109	52	43	3	40	138	4	38	

Infant Life Protection.—The following figures give particulars of the number of persons registered under the Children and Young Persons Act for the reception of children under the age of nine :—

Number of Children in care of Foster Mothers 1st January, 1933	265
Number of Children placed under Foster Mothers during year 1933	353
Number of Children removed from care of Foster Mothers during 1933	281
Number of Children in care of Foster Mothers 31st December, 1933	337
Number of new Foster Mothers registered during year 1933	186
Number of Foster Mothers having children under their care on 31st December, 1933	242
Number of Foster Mothers not found to be suitable for registration during 1933	4
Number of Certificates of Registration cancelled during 1933	1

As regards the work carried out by the Infant Protection Visitors, the following information has been given me by Miss Harrington for 1933 :—

Number of children under supervision during year	518
Total number of visits paid	3,566
Number of forms giving home conditions	155

The reports sent in by the nurses contained information regarding the size of the house, its condition and the suitability of the mother to care for and supervise young children. Where conditions are not satisfactory, steps are taken to remedy them or to transfer the child or children to a more suitable home. If conditions are satisfactory, a certificate is issued approving the reception of a specified number of children.

SANITARY SERVICES IN THE COUNTY.

The following is an up-to-date summary of the sanitary and special services provided by Local Sanitary Authorities in the County.

Urban Districts.

BALDOCK.

Water Supply	Adequate supply from First Garden City, Ltd., Pumping Station for practically whole district ; few wells.
Sewage Disposal	Public system for whole district ; disposal works near Icknield Way. Sewage enters large tank after screening and is pumped into a reservoir twice daily, and then run on to land under cultivation and treated by systematic broad irrigation.
Scavenging	Once weekly in open conveyance. Existing dump has been overhauled and disposal is now carried out on the Bradford System.

- Infectious Diseases . Cases sent by arrangement to Letchworth Urban and Hitchin Rural Hospital ; swabs examined at County's Public Health laboratories ; antitoxin supplied when required ; no steam disinfectors provided ; clothing and houses disinfected with paraformaldehyde and formalin.
- Housing . . . Nine Council houses erected during 1933. Nine houses erected by private enterprise.

BARNET.

- Water Supply . Public supply for the whole district from the Barnet and District Gas and Water Co., from wells sunk into the chalk ; the supply is adequate.
- Sewage Disposal . Water carriage system for the whole district except in older portions of district, where combined system obtains. Certain outlying properties are drained to cesspools ; part of Totteridge is drained into Finchley sewer. Sewage Farm is situated in Mays Lane, and is 56 acres in extent ; method of disposal : three rotary filters, detritus and sedimentation tanks, and land irrigation ; pumping is necessary for one sewer ; some extension of the system is contemplated.
- Scavenging . . . Weekly collection for whole district in covered conveyances.
- Infectious Diseases . Cases of infectious diseases removed to Barnet Joint Isolation Hospital ; swabs examined by arrangement with Clinical Research Association ; supplies of antitoxin kept for local practitioners. A steam disinfectors is available ; houses are fumigated with formaldehyde.
- Housing . . . The Council's Housing Estates comprise 538 houses and flats and 4 shops.
Land is to be purchased for the erection of approximately 40 more houses to accommodate persons being displaced from insanitary property, through improvement schemes.

BISHOP'S STORTFORD.

- Water Supply . Adequate supply from deep wells, which serves whole district.
- Sewage Disposal . Public system for greater part of district ; there are now only 10 cesspools. Sewage gravitates to tanks, is screened and pumped on to high level, and is dealt with by broad land irrigation ; effluent to River Stort. Extension of land for irrigation may be necessary at some future date. Disposal works outside district in Essex.
- Scavenging . . . Weekly in covered conveyance.
- Infectious Diseases . Cases admitted by special arrangement to Isolation Hospital ; swabs sent to laboratory at Hill End Mental Hospital ; antitoxin kept at Isolation Hospital ; steam disinfectors at Isolation Hospital ; houses disinfected with formaldehyde.
- Housing . . . Twenty-six houses in course of erection ; 56 houses contemplated.

BUSHEY.

Water Supply	.	Adequate supply for whole district from Colne Valley Water Co.
Sewage Disposal	.	Public system for whole district with the exception of the northern part and a few small areas. Disposal works have recently been extended, and will now deal with sewage from population of 17,000 ; anærobic and ærobic methods of treatment are adopted ; percolating filters and filtration through sand ; experiments as to digestion of sludge being carried out.
Scavenging	.	Weekly collection in covered conveyance.
Infectious Diseases	.	Cases admitted to Watford Joint Hospital, which serves district ; swabs sent to Clinical Research Association ; antitoxin kept by Council. Steam disinfectors at Isolation Hospital. Houses disinfected by Sanitary Inspector.
Housing	.	Sixteen houses were completed by the Council during 1933, six of these being for tenant purchase. Total number of houses owned by Local Authority 168.

CHESHUNT.

Water Supply	.	Public supply for practically whole district from Metropolitan Water Board, private wells in a few country houses.
Sewage Disposal	.	Public system for whole district except some country houses. Sewage disposal works on Cheshunt Marsh in Parish of Enfield, consists of septic tanks, revolving sprinklers, humus tanks, and filtration over several acres of ground.
Scavenging	.	Weekly collection in covered conveyance.
Infectious Diseases	.	Cases removed to Cheshunt Isolation Hospital ; examination of swabs arranged by M.O.H. Antitoxin kept at U.D.C. Offices and house of M.O.H. No local disinfectors available, but there are arrangements for disinfection with Enfield ; house disinfection by formalin lamps.
Housing	.	None under Housing Acts, but 145 by private enterprise.

CHORLEYWOOD.

Water Supply	.	Adequate supply for practically the whole district from the Rickmansworth and Uxbridge Valley Water Co. ; three private wells.
Sewage disposal	.	Public system for greater part of district. Few cesspools. Disposal works at Maple Cross consist of detritus and screening chamber, two sedimentation tanks, three primary and secondary filters, and two humus tanks ; effluent to tributary of River Colne.
Scavenging	.	Collection weekly in covered conveyance.
Infectious Diseases	.	Cases admitted to Joint Hospital serving district swabs sent to Clinical Research Association. Antitoxin kept by Council. Steam Disinfectors at Isolation Hospital ; houses disinfected by Sanitary Inspector.
Housing	.	Total number of houses owned by Local Authority, 57.

EAST BARNET VALLEY.

Water Supply . Adequate supply from the Barnet District Gas and Water Co. from wells and borings ; whole district served.

Sewage Disposal . Public system for whole of district except for a very small number of large houses in isolated positions.

Disposal works situated at Brunswick Park Road at junction with Osidge Lane, sewage conveyed by five main outfall sewers ; the sewage from two of these passes through pyramidal settlement tanks and then on to the land ; the sewage from the remaining three sewers passes direct on to the land ; the site is under drained, all drains leading to settling tanks which feed a series of percolating filters. The effluent is discharged into Pymmes Brook.

Having regard to the abnormal development now taking place in the district owing to the opening of the extension of the London Electric Railway Company's Piccadilly line to Cockfosters, it is apparent that the present works will be seriously overloaded in the near future.

The Council have given instructions for a scheme for the complete reconstruction of the works to be prepared and it is hoped that it will be possible for a commencement to be made about the end of 1934.

A weekly collection of house refuse is made over the whole of this district. The vehicles at present consist of covered trailers ; whilst being filled the trailers are hauled by horses ; when full the trailers are hauled to the tip by means of a tractor. These vehicles have been in use for about 6 years and they are in need of renewal.

The Council have given instructions for trial collection by the latest types of covered vehicles with a view to the purchase of new plant.

House refuse which was tipped and " fired " at the Council's Sewage Farm is now disposed of by " controlled tipping " at Oak Hill Park, East Barnet.

The scheme appears to be working very satisfactorily—no complaints of any description have been received.

Infectious Diseases . Cases to Barnet Joint Isolation Hospital ; swabs sent for examination to Clinical Research Association ; supplies of antitoxin kept by Council. Steam disinfecter available at Isolation Hospital. Rooms and contents sprayed with formalin.

Housing . . No Council houses were built during the year ; 270 houses were built by private enterprise. The question of slum clearance has been under consideration and it is proposed that clearance schemes be considered in respect of five small areas comprising 29 houses in all and individual demolition orders for six other houses.

BERKHAMPSTEAD.

- Water Supply . Public supply for practically the whole district from the Berkhamstead Water Company, which also supplies adjoining districts ; supply is adequate ; there are a few wells.
- Sewage Disposal . Conservancy system for whole district ; sewage disposal works at Broadway, Berkhamstead, consist of septic tanks and rotary percolating filters, effluent discharged to Grand Union Canal ; system also serves Northchurch Village, Berkhamstead Rural ; a large extension has been completed.
- Scavenging . . Weekly collection for whole district in covered carts with automatic covers. Bradford system of disposal recently adopted.
- Infectious Diseases . Cases admitted to Aldbury Hospital ; cost of examination of swabs reimbursed to medical practitioners ; antitoxin supplied by Council through Sanitary Inspector ; steam disinfecter available ; disinfection carried out by sanitary staff.
- Housing . . Forty-six houses completed under Housing Acts during 1931 ; 20 new houses erected in 1933.

HARPENDEN.

- Water Supply . Adequate supply from Harpenden Water Co. from deep wells for almost whole district ; a few wells. Company also supplies Wheathampstead and Batford.
- Sewage Disposal . Public system except for outlying farms. Disposal works on eastern boundary of district. Slate beds, tanks, and percolating filters ; also serves part of St. Albans Rural District.
- Scavenging . . Weekly collection in covered conveyance.
- Infectious Diseases . Cases to St. Albans Hospital ; swabs, etc., sent to laboratory at Hill End Mental Hospital. Antitoxin kept by Council. Disinfecter available at St. Albans Isolation Hospital, to which clothes are sent. House disinfection by formalin spray and lamps.
- Housing . . The Council have erected 72 houses. Financial assistance to Workmen's Housing Association for the erection of 72 houses, which were completed in August, 1932. Loans to owner-occupiers under the Small Dwellings Acquisition Acts in respect of 340 houses.

HEMEL HEMPSTEAD.

- Water Supply . Adequate supply from two borings for whole district, with the exception of about a dozen houses, mostly at Bourne End ; also supplies parts of St. Albans Rural District (Leverstock Green) and Watford Rural District (portion of Nash Mill District).
- Sewage Disposal . Public system except for outlying farms and cottages ; disposal works at Bennett's End ; sewage is pumped from Apsley and passes through sedimentation tanks and percolating filters, and is finally treated by broad irrigation.

System also serves portion of Leverstock Green in St. Albans Rural District. The Council have decided to remodel the existing sewage works on up to date lines. Plans have already been prepared for submission to the Ministry of Health.

- Scavenging . . . Weekly collection in covered conveyance.
- Infectious Diseases . Cases to Joint Isolation Hospital; swabs sent to laboratory at Hill End Mental Hospital. Antitoxin supplied from Public Health Department; steam disinfectant at Isolation Hospital. Houses disinfected by formalin spray and lamps.
- Housing . . . Forty-two houses were completed in 1932; 68 houses completed in 1933; 50 houses to be built in 1934.

HERTFORD

- Water Supply . . . Adequate supply for whole district from wells in chalk owned by Corporation; supplies part of Hertford Rural District.
- Sewage Disposal . . . Public system for whole district; disposal works within eastern boundary of borough consist of detritus tanks, sedimentation tanks, activated sludge tanks and sludge digestion. Part of Hertford Rural District is served by system; no extension beyond necessary sewage extensions.
- Scavenging . . . Weekly, in covered freighter; disposed by controlled tipping on Bradford system.
- Infectious Diseases . Cases to Hertford and Ware Joint Hospital; swabs examined at laboratory at Hill End Mental Hospital. Antitoxin diphtheria at The Castle; steam disinfectant at Isolation Hospital. Houses disinfected with formaldehyde.
- Housing . . . Houses erected during 1933, 79. Houses being erected during 1934, 42.

HITCHIN

- Water Supply . . . Adequate public supply for whole district except small hamlet of Charlton and few houses; new boring just been made at Temple End; also supplies Ippollitts and Ickleford in Hitchin Rural District.
- Sewage Disposal . . . Public system for whole district except Charlton and few scattered houses; extended within last two years. Disposal works at Grove Road consist of tanks and percolating filters. System also serves few scattered houses outside the Urban District.
- Scavenging . . . Weekly collection in covered conveyance.
- Infectious Diseases . Cases sent by arrangement with the Joint Isolation Hospital; swabs examined at cost of Council; antitoxin supplied free of cost. Steam disinfectant at Isolation Hospital; house disinfection by spraying disinfectant fluid followed by formaldehyde gas fumigation.
- Housing . . . Number of houses in course of erection, 166.

HODDESDON.

- Water Supply . Adequate supply for practically whole district from deep well in chalk ; also serves small number of houses in Ware Rural District.
- Sewage Disposal . Main sewerage scheme, separate for soil and surface water ; whole district served except for few isolated houses. Disposal works in north-east of district consist of detritus and settling tanks, contact beds, and rotary percolating filters ; sewage taken from houses in Amwell Parish. Council have under consideration electrification scheme of pumping machinery and extension of works.
- Scavenging . Weekly collection in covered conveyance.
- Infectious Diseases . Cases to Hertford and Ware Isolation Hospital, where clothing is disinfected ; swabs, etc., sent to laboratory at Hill End Mental Hospital. Diphtheria antitoxin kept at Council Offices. Formalin disinfection of houses.
- Housing . During the past year 1931 houses have been erected.

LETCHWORTH.

- Water Supply . Adequate supply for whole district from pumping station ; four borings at Weston Hill ; also supplies part of Hitchin Rural District and Baldock Urban.
- Sewage Disposal . Whole district served except for few houses and farms in isolated positions ; separate systems for sewage and surface water sewage to sewage farm and surface water empties into Pix Brook. Disposal works just beyond north-western boundary in Biggleswade R.D.C. ; consist of settling tanks, with primary and secondary filtration ; effluent discharged into Pix Brook. System serves Isolation Hospital in Hitchin Urban District.
- Scavenging . House refuse weekly, trade refuse daily in some instances ; covered freighters.
- Infectious Diseases . Cases admitted to Hospital of Hitchin Rural and Letchworth Urban Joint Board ; swabs sent to Thresh and Beale, London ; antitoxin kept at Isolation Hospital. Steam disinfector at Isolation Hospital ; disinfection of houses carried out by Sanitary Inspector.
- Housing . 1,313 houses now erected by the Council.

RICKMANSWORTH.

- Water Supply . Adequate supply for practically whole district from Rickmansworth and Uxbridge Valley Water Co. ; a few isolated houses supplied from wells.
- Sewage Disposal . Public scheme for whole district, except Heronsgate and isolated houses. Sewage gravitates to pumping stations and is pumped on to land ; septic tanks and land irrigation. A few houses in Chorleywood and in Watford Rural District drain into system.
- Scavenging . Weekly in covered conveyances ; refuse disposed of by " controlled " tipping.

Infectious Diseases . Cases to Watford Joint Isolation Hospital; swabs sent to Peace Memorial Hospital, Watford; antitoxin kept at Council Offices. Infected clothing sent for disinfection to Isolation Hospital; house disinfection carried out by Council's staff.

Housing . . . Sixteen houses were completed during the year 1933, being part of a further contract for 44 houses. The remainder will be ready for occupation early in 1934. When these are completed the total number of houses erected will be 398.

ROYSTON.

Water Supply . Adequate public supply for whole district.

Sewage Disposal . Public system for whole district: a few cesspools and earth-closets on outskirts.

Scavenging . . . Weekly collection in whole district.

Infectious Diseases . Cases to Joint Hospital, but only one disease can be admitted; swabs and antitoxin paid for if necessary.

Housing . . . 91 houses erected by Council between 1919-1933; 40 more under consideration. Several erected by private enterprise.

ST. ALBANS

Water Supply . Adequate supply for whole district from St. Albans Water Works Co.; parts of surrounding districts also supplied.

Sewage Disposal . Public system for whole district; sewage disposal works at Park Street consist of septic tanks with sprinklers and primary and secondary filtration; some extension of the system is contemplated.

Scavenging . . . Weekly collection in covered conveyance, daily in shopping area.

Infectious Diseases . Cases admitted to St. Albans Isolation Hospital; swabs sent to Clinical Research Association and Hill End; antitoxin provided by Council. Steam disinfectors at Isolation Hospital; houses disinfected by formalin lamps.

Housing . . . The number of houses erected or to be erected under the Assisted Scheme was nil, and by private enterprise 414.

SAWBRIDGEWORTH.

Water Supply . Adequate supply for whole district, with the exception of the outlying hamlet of Spelbrook, from the Herts and Essex Waterworks Co.; shallow wells at Spelbrook.

Sewage Disposal . Public system for whole district, with exception of Spelbrook; sewage by gravitation to sewage farm. Disposal works in south-east of district consist of septic tanks and filter beds; effluent River Stort.

Scavenging . . . Twice weekly collection in covered conveyance.

Infectious Diseases . Cases admitted to Isolation Hospital; swabs sent to the County Laboratory at Hill End; antitoxin kept by Medical Officer of Health. Steam disinfectors at Isolation Hospital; house disinfection by Sanitary Inspector.

Housing . . . The number of houses built and occupied during the year 1933 was 31.

STEVENAGE.

- Water Supply . Supply but with a small margin for greater part of district; amount has had to be restricted owing to dry weather; wells for outlying farms and cottages. Supply obtained from deep boreholes at Rooks Nest, also supplies Graveley and part of Great Wymondley. A well boring has been made at Bromin Green in the south-west of the town; to use this supply as supplementary it will be necessary to construct a rising main. Application for a loan for this purpose has been made.
- Sewage Disposal . Public system for whole town except few houses on outskirts. Disposal works are to the south of the town, adjoining Great North Road. Consists of filter beds.
- Scavenging . . Weekly collection in covered conveyances.
- Infectious Diseases . Arrangements for admission of cases to Hertford and Ware Isolation Hospital; swabs, etc., sent to the laboratory at Hill End Mental Hospital. Antitoxin provided in necessitous cases. No steam disinfectors provided. Rooms disinfected by formaldehyde vapour or spray.
- Housing . . During 1933 80 new houses were completed and are now occupied.

TRING.

- Water Supply . Adequate supply from Chiltern Hills Spring Water Co. available for whole district except Bulbourne hamlet, but many houses are not connected; deep wells and also some shallow wells at Bulbourne. Adjoining district also supplied with Company's water.
- Sewage Disposal . Public system for whole district, except outlying hamlets; disposal works on west side of Tring Ford Reservoir. Sewage pumped to high level after having passed through screening and settling tanks, and is treated by broad irrigation; land is under-drained, and effluent runs into a brook running into Tring Ford Reservoir.
- Scavenging . . Weekly collection in covered conveyance.
- Infectious Diseases . Cases to Urban District Isolation Hospital; swabs, etc., sent to Clinical Research Association; antitoxin at office of Sanitary Inspector. Steam disinfectors at Isolation Hospital; houses disinfected with formalin lamps.
- Housing . . Twenty-four houses have been erected by the Workmen's Housing Association, and are let at a rent of 4s. 7d. per week exclusive of rates, the Council to have choice of tenants.

WARE

- Water Supply . Adequate supply for whole district from deep wells the property of the Council; also supplies portion of adjoining rural area.
- Sewage Disposal . Public system for whole district; disposal works at Rye Farm, near Hoddesdon, which consists of 140 acres; sewage pumped from pumping station at Stanstead Abbots to farm, treatment

by broad irrigation. System also serves adjoining rural area.

- Scavenging . . . Weekly collection in covered conveyance.
- Infectious Diseases . . . Cases admitted to Joint Isolation Hospital ; swabs, etc., are sent to the laboratory at Hill End Mental Hospital. Antitoxin kept at Isolation Hospital. Steam disinfectors at Isolation Hospital to which infected clothing is sent. Houses disinfected by Sanitary Inspector.
- Housing . . . The number of houses constructed in 1932 was 168. In addition there are 88 houses contemplated under the 1924 and 1930 Housing Acts.

WATFORD

- Water Supply . . . Adequate supply for whole district mainly from deep wells owned by Corporation. Oxhey supplied by Colne Valley Water Works Co., and Garston supplied by Rickmansworth and Uxbridge Valley Co. Part of Watford Rural supplied.
- Sewage Disposal . . . Public System for whole district. Disposal works at Holywell Farm, 130 acres ; 40 acres retained for system of intermittent downward filtration, a further 40 acres being kept in reserve. There were 314 cesspools at Garston, but these are being abolished as the main sewer has been constructed to this district. The Corporation is emptying free of charge to the remaining cesspool owners until all possible connections are made with the sewer.
- Scavenging . . . Collection once per week in covered conveyances ; in special cases collection once daily.
- Infectious Diseases . . . Cases admitted to Isolation Hospital ; swabs now sent to Peace Memorial Hospital ; antitoxin kept at Council Offices. Steam disinfectors at Isolation Hospital ; houses disinfected by Sanitary Inspectors with formalin and spraying.
- Housing . . . There were 207 houses either completed or in course of erection during 1933. Demolition of 122 slum dwellings is now in progress following the inquiry of the Ministry of Health in 1933. These houses contained 131 families for whom accommodation has now been provided at Leavesden Green.

WELWYN GARDEN CITY.

- Water Supply . . . Adequate supply from boreholes in the middle chalk in the Mimram Valley ; whole district served except for few houses which have well supplies. Bulk supply given to the Rural District of Welwyn, also a supplementary supply to Knebworth. The Water Undertaking is owned and operated by the Urban District Council.
- Sewage Disposal . . . Public system for whole district except the village of Hatfield Hyde and about twenty outlying cottages. Disposal works are situated in the Black Fan Valley, and consist of detritus tanks, screening chambers, sedimentation tanks, and filters. Work on proposed extensions will commence shortly.

- Scavenging . . . Collection once a week in covered motor vehicles and twice weekly from hotels, restaurants, and hospital. Dry refuse disposed of by strictly controlled tipping. Sec. 64 of the Welwyn Garden City Act, 1932, provides for all dwelling-houses to be provided with a regulation dustbin.
- Infectious Diseases . . . Arrangements made for admission of cases to Letchworth Isolation Hospital or Hertford and Ware Isolation Hospital; swabs, etc., sent to the laboratory at Hill End Mental Hospital. Antitoxin kept at Cottage Hospital. No steam disinfectors for district; clothing may be sent to Letchworth Hospital. Izal is supplied to infected houses; rooms disinfected with formalin candles and vapour.
- Housing . . . During 1933 57 houses and 8 flats for aged couples were completed.

ASHWELL.

- Water Supply . . . Public supply to special Drainage District and few public pumps from deep well in chalk; other sources of supply are deep wells, shallow wells, rain-water storage tanks, and ponds.
- Sewage Disposal . . . Public service for Ashwell Special Drainage District only; disposal works consist of two septic tanks and broad irrigation.
- Scavenging . . . No collection.
- Infectious Diseases . . . Cases of infectious disease to Joint Isolation Hospital, which can only admit one disease, and elsewhere by arrangement. Steam disinfectors at Isolation Hospital, but only used for hospital purposes; house disinfection by spraying and fumigation.
- Housing . . . The number of houses which have been erected is 86, of which 34 were under Assisted Scheme and 52 under the Act of 1924. Twenty-six new houses have been erected and are all occupied.

BARNET

- Water Supply . . . Adequate supply for greater part of district from Barnet District Gas and Water Co., Colne Valley Water Co., and a few houses served by the St. Albans Water Co.; about half a dozen shallow wells
- Sewage Disposal . . . Most of the developed part of district has public system. There are three disposal works at St. Catherine Bourne, Shenley, Tilehouse Farm, Boreham Wood, and Medburn Farm, Elstree. The two former have sedimentation tanks and percolating filters, and the latter has sedimentation tanks and treatment by broad irrigation. Parts of Watford Rural District and few houses in Borough of Hendon are served by the system.
- Scavenging . . . Weekly collection in most of the area, covered conveyance for large part. Largest portion of house refuse disposed of by controlled tipping.
- Infectious Diseases . . . Cases of infectious disease to Barnet Joint Isolation Hospital; swabs examined at Clinical Research Association. Antitoxin provided as required.

- Steam disinfectant at Isolation Hospital. Houses disinfected by formalin lamps or spray.
- Housing . . Further housing scheme in course of preparation and negotiations proceeding for acquisition of site.

BERKHAMPSTEAD

- Water Supply . Considerable part of district served by Great Berkhamstead Waterworks Co., Chiltern Hills Spring Co., and Ashridge Water Co. ; supply also obtained from private wells.
- Sewage Disposal . Public system for part of district. Cesspools and earth-closets. Sewage conveyed from Northchurch to Great Berkhamstead Disposal Works, where it is dealt with by septic tanks and percolating filters. Long Marston broad irrigation and Wilstone broad irrigation.
- Scavenging . . Weekly collection at Northchurch ; fortnightly, monthly, and two-monthly at other districts. Covered conveyance for Northchurch and Berkhamsted Rural Parish.
- Infectious Diseases . Cases of infectious disease sent to Aldbury Isolation Hospital. Examination of swabs provided for. Council pays for antitoxin obtained by medical practitioners. No steam disinfectant available ; houses disinfected by formalin lamp.
- Housing . . Four houses were erected in 1932 ; 17 new houses were commenced in 1933.

BUNTINGFORD.

- Water Supply . Buntingford has public supply from a deep well ; works are Council property. Other sources of supply are natural spring and deep and shallow wells.
- Sewage Disposal . Public system to part of district ; remainder of district has cesspools and pail-closets. Disposal works at south end of Buntingford ; treatment by broad irrigation after screening.
- Scavenging . . Weekly collection in covered conveyance for Buntingford town only.
- Infectious Diseases . Cases sent to Buntingford Isolation Hospital ; swabs, etc., examined at laboratory at Hill End Mental Hospital. Diphtheria and tetanus antitoxin at office of Sanitary Inspector. There is a small disinfectant at the hospital. Houses disinfected by means of formaldehyde.
- Housing . . During 1933 18 new houses were built ; 34 additional houses are being erected.

HADHAM.

- Water Supply . Public supply for Much Hadham and surrounding hamlets from deep well in chalk ; rest of district supplied by wells, many of which are deep wells. High Wych supplied by Herts and Essex Water Co.
- Sewage Disposal . Public system for parts of district ; disposal works at south end of Much Hadham, treatment by broad irrigation ; also at High Wych. Braughing (part of) has small irrigation area for slop water.

Scavenging . . .	Weekly collection for Much Hadham (general) and for Braughing (tins only).
Infectious Diseases .	Cases to Joint Isolation Hospital at Bishop's Stortford; swabs, etc., to laboratory at Hill End Mental Hospital. Antitoxin kept at Isolation Hospital. Steam disinfectant at Isolation Hospital, to which infected clothing is sent. Houses are disinfected by formaldehyde.
Housing . . .	No further houses in course of erection or contemplated. Twelve houses at Braughing completed in 1933.

HATFIELD.

Water Supply . . .	Public supply for the greater part of the area from the mains of the Barnet District Gas and Water Co. and for Essendon from a bore at Essendon Mill, wells, springs and pumps in the rural areas.
Sewage Disposal . . .	Public system of sewers for portions of the district; elsewhere cesspools and pail closets. Disposal works at : Mill Green, Hatfield, Newgate Street Village, and Welham Green, consisting of : settling tanks, bacteria beds, and humus tanks; and at Cuffley and Littleheath, settling tanks, bacteria beds, and land treatment. A comprehensive scheme for the drainage of the major portion of the parish of North Mimms is now being prepared and also a new scheme for the village of Essendon.
Scavenging . . .	Weekly collection generally, twice weekly in some parts of Hatfield Town; covered conveyances always used.
Infectious Diseases .	Cases sent by arrangement to Hertford and Ware Isolation Hospital; examination of swabs paid for in necessitous cases; antitoxin supplied where required; no steam disinfection; rooms and clothing are disinfected with formalin.
Housing . . .	The number of houses built in 1933 was 115, including 12 erected by the Council.

HEMEL HEMPSTEAD

Water Supply . . .	A considerable part of the district has a public supply from various sources, all from the chalk. Outlying portions have private wells and filtered rain-water.
Sewage Disposal . . .	Water carriage system for portions of the district cesspools, and earth-closets. Disposal works at King's Langley and Markyate, double or single filtration and percolating filters and Flamstead and Flaunden treatment by discharging on to land.
Scavenging . . .	Weekly or fortnightly collection for most of district.
Infectious Diseases .	Cases of infectious disease to Hemel Hempstead Isolation Hospital; swabs to Clinical Research Association; antitoxin kept at office of Sanitary Inspector; disinfectant at Isolation Hospital used when required; house disinfection by sanitary staff.

- Housing . . Houses built by Local Authority during 1933, 7 ; houses to be built in 1934 are 4.

HERTFORD

- Water Supply . Public supply for portions of district from tube well, Welwyn R.D.C., Metropolitan Water Board, also private supplies and shallow wells.
- Sewage Disposal . Public system for parts of district. At Little Amwell and Aston open tanks, filters, and broad irrigation ; at Walkern sedimentation tank and broad irrigation ; at Tewin sedimentation tank and sub-irrigation. In other parts of district cesspools and earth-closets.
- Scavenging . . No collection except at Little Amwell.
- Infectious Diseases . Cases to Hertford and Ware Isolation Hospital ; swabs, etc., sent to laboratory at Hill End Mental Hospital ; antitoxin kept at Isolation Hospital ; steam disinfectant at Isolation Hospital ; houses disinfected by formaldehyde.
- Housing . . No houses built during 1933. In course of erection, 8 ; number contemplated, 40.

HITCHIN

- Water Supply . Public supply for ten districts in area ; water in bulk being taken in some cases from Hitchin Urban District, Letchworth Garden City Co., and Stevenage Urban District.
- Sewage Disposal . Public system for more populous parts of districts ; nine small disposal works ; one privately owned. General method adopted is by settling tanks in alternate use and broad irrigation. The question of making provision for the parishes of Ickleford and Breachwood Green and Whitwell is under consideration.
- Scavenging . . This service has been completely reorganized. A district collection by the Council's employees in a specially constructed motor vehicle is now in operation.
There is a regular weekly collection of all household refuse in the parish of Knebworth, while indestructible refuse is collected once every four weeks from all other parishes in the district.
- Infectious Diseases . Cases admitted to Joint Isolation Hospital ; swabs sent to County Public Health Laboratories ; antitoxin kept at Isolation Hospital ; steam disinfectant at hospital available when necessary. House disinfection carried out with formalin vapour.
- Housing . . Number of cottages in course of erection by the Council—6, making a total of 720 erected and owned by the Rural District.

ST. ALBANS

- Water Supply . . Public supply for greater portion of district from Harpenden Water Co., St. Albans Water Co., Barnet Water Co., Hatfield Water Co., Colne Valley Water Co., and public wells.
- Sewage Disposal . Public system for parts of district ; public and private cesspools ; arrangements can be made

for emptying cesspools. Sewage disposal works at Nast Hyde, London Colney, and Wheathampstead.

- Scavenging . . . Weekly collection in covered conveyance except in outlying districts.
- Infectious Diseases . Cases of infectious disease to St. Albans Hospital ; swabs sent to Clinical Research Association and Hill End laboratory ; antitoxin supplied at Council's expense ; steam disinfectant at St. Albans Hospital ; house disinfection by sanitary staff.
- Housing . . . Houses erected by private enterprise, 233 ; Council houses erected, 12 at Colney Heath.

WARE

- Water Supply . . . Public supply from deep well in chalk for Wormley and Broxbourne ; Great Amwell has a piped supply from the Met. W.B. ; rest of district served by wells, mostly deep ; a few houses in Hoddesdon are supplied. Consideration is being given to a comprehensive water scheme to serve the other parts of the district.
- Sewage Disposal . . . Public system for parts of the district ; disposal works at Wormley, Broxbourne, and Stanstead Abbots ; treatment by broad irrigation.
- Scavenging . . . Weekly collection in covered conveyance in parts of district, bi-weekly collection of contents of pails.
- Infectious Diseases . Cases sent to Joint Isolation Hospital ; swabs to laboratory at Hill End Mental Hospital ; steam disinfectant at Isolation Hospital ; house disinfection by formaldehyde.
- Housing . . . Twenty-four houses have been built during 1933, and the erection of a further 80 houses is contemplated in various parts of the district.

WATFORD

- Water Supply . . . Public supply for the whole of the district from Rickmansworth and Uxbridge Valley Water Co., Colne Valley Water Co., Watford Borough, and Hemel Hempstead Borough ; thirty-three wells.
- Sewage Disposal . . . Public system for more populous parts of district ; cesspools and earth-closets. There are a number of small sewage disposal works in the district, also sewage is dealt with at works in adjoining districts.
- Scavenging . . . Generally weekly collection ; in some districts fortnightly and monthly ; covered conveyance in Aldenham district ; other districts tarpaulin cover provided.
- Infectious Diseases . Cases of Infectious disease to Joint Hospital at Watford ; swabs to Clinical Research Association ; antitoxin kept at Council Offices. Steam disinfectant at Isolation Hospital ; house disinfection carried out by Sanitary Inspector.
- Housing . . . Total number of houses owned by Local Authority, 222 ; number built during the year, 19.

WELWYN

- Water Supply . Public supply from Welwyn Garden City Company to parishes of Welwyn and Digswell. Small portion supplied by Hitchin Rural District Council. Welwyn Waterworks to be used for future extension; few wells. Question of extension of public supply to Parish of Ayot St. Peter is under consideration.
- Sewage Disposal . Public scheme for portion of parish of Welwyn; cesspools and earth-closets. Disposal works consist of septic tanks and pumping station in Mill Lane and revolving filters and irrigation land on south-west side of Station Road; ultimate effluent passes into River Mimram. The scheme of sewerage and sewage disposal for Woolmer Green is nearing completion.
- Scavenging . . Weekly collection generally in covered conveyance.
- Infectious Diseases . Cases of infectious disease are admitted by arrangement to the Letchworth or Hertford and Ware Isolation Hospitals; swabs sent to Hill End Mental Hospital laboratory; antitoxin kept at Cottage Hospital. There is no steam disinfecter, but articles are occasionally sent to the Isolation Hospitals for disinfection. Houses are disinfected with sulphur or formalin; disinfectant supplied in cases of tuberculosis.
- Housing . . The Council have now erected a total of 210 houses and an additional 60 are in course of erection.

WATER SUPPLIES IN RURAL DISTRICTS.

During the year special attention has been given by the County Council to the question of water supplies in rural districts and to the steps which should be taken not only to increase and extend permanent supplies but to provide arrangements for meeting temporary shortage in the event of dry weather continuing during the summer and autumn months. The first step taken by the County Council was to arrange for an expert survey of the existing water supply systems in rural districts to be made by a competent engineer. Messrs. D. Balfour & Sons were appointed for this purpose and they have completed their inspection of the existing water supplies in the Rural Districts of Hitchin, Ashwell, Buntingford, and Hadham, and have submitted a report recommending a comprehensive scheme for the augmentation and improvement of existing supplies and for providing new sources when required in these districts. The same firm have also advised the Rural District Councils of Hertford and Ware on their water supply systems and have submitted recommendations to these two authorities for their improvement and extension.

A survey of the existing water supplies in the remaining rural districts in the County will be undertaken in due course, but in these districts the position is not so urgent as in all of them piped supplies are available. As regards the financial assistance to be given to the Rural District Councils, the County Council at their meeting held on 6th November, 1933, passed the following resolutions :—

- (1) That assistance be given to the Rural District Councils in the County, under Section 57 (1) of "The Local Government Act, 1929", in the provision of supplies of water.
- (2) That approval of the County Council be, and the same is hereby, given to the following scheme for determining the amount of assistance to be given under the preceding resolution, in respect of schemes already in existence or schemes to be approved :—

(a) The Rural District Council should charge a minimum tariff of 10 per cent on the rateable value for domestic supplies, and 1s. 6d. per thousand gallons for measured supplies.

(b) The surpluses or deficiencies on all water undertakings in a Rural District to be ascertained, and the resulting aggregate nett surplus or deficiency expressed as a rate in the £ on the General District Rate.

(c) The Rural District Council to be required to bear the cost of such nett deficiencies up to the equivalent of a rate of 6d. in the £.

(d) Any excess beyond such figure to be borne in equal proportions by the County Council and the Rural District Council, but so that the total to be borne by the Rural District Council is not to exceed the equivalent of 1s. in the £ on the General Rate ; the County Council to bear anything in excess.

(e) All new schemes proposed to be adopted by any Rural District Council must be submitted to, and approved by, the County Council in order to be eligible for a grant.

The following particulars indicate the position as regards the water supplies in the various Rural Districts in the County during the month of March, 1934.

Ashwell.—In Therfield, Kelshall, and Nuthampstead supply is becoming inadequate as water is obtained from rain tanks and ponds. At Therfield water from a public shallow well is rationed. At Ashwell level of water in well at waterworks is only 3 feet; pumping is stopped after 5 hours. Water level getting low in shallow and deep wells. At Ashwell notices issued warning inhabitants of shortage.

If necessary to convey water to any of the villages this will be done from Royston.

Barnet.—No shortage experienced; whole of the district except a few isolated houses is served by the Colne Valley Water Company and the Barnet Water Company. In the cases of isolated houses if shortage experienced, water would be carted.

Berkhampstead.—No complaints as to shortage of water. There is a piped supply in every parish except one small parish with about 50 inhabitants; in this parish no signs of wells giving out. This rural district is served by three different companies.

Buntingford.—Of the sixteen parishes in this district ten parishes comprising 2,500 inhabitants are seriously deficient in water. Many of the people have to rely on the good-will of their neighbours for a pailful or two per day. The parishes with a piped supply obtain the water from a deep well in the chalk; the water level in this well has fallen so much during the past six months that the Council are taking steps to provide an additional pump. Instructions have been given to convey water from Buntingford Waterworks to all districts which are in need. Efforts are being made to locate any disused wells with a view to their being opened for domestic use if suitable. There are no lakes or ponds and the two streams passing through the district have dried up.

Hadham.—Shortage for domestic use exists only in isolated parts of the district, more particularly parts of High Wych and at Stocking Pelham. Inhabitants are fetching or carting water from supplies at varying distances. No special action has so far been called for. In case of necessity supply is available by mains which can be made, or by cartage.

Hatfield.—District generally is well watered by Barnet District Gas and Water Company, and by Council's own supply; some of the private wells and wells supplying isolated houses are reported to have failed. No further measures are considered necessary at the present time; if necessary, extension of mains could be made to cover most of the points where a shortage might be serious.

Hemel Hempstead.—Three of the six parishes are supplied by Water Companies; of the three remaining Parishes two have water from waterworks owned by the Council and the third is supplied from wells. This parish is Great Gaddesden, and is the only one in which there has been any known shortage; this is met by the carting of water. The bore which the Council has sunk in one part of this parish shows no sign of running dry. Springs generally show no signs of returning to the usual level for this time of the year. The Council is anxious to improve the water undertaking in Flamstead parish.

Hertford.—Serious shortage of water for domestic purposes exists in ten parts of this district; water is being carted at Aston and Benington. Supply satisfactory in Metropolitan Water Board area; supplies from private sources also available in some areas. Special arrangements are being made by the Council to procure a large container to convey water to tanks in districts where need is urgent. The Council are providing new permanent supplies in parishes of Aston, Benington, Walkern, Watton, Sacombe, Stapleford, and Bengoe Rural. Work is commencing for a supply to the parishes of Brickendon Liberty and Little Berkhamstead.

Hitchin.—There has been some serious shortage of water for domestic purposes in the parishes of Kimpton and St. Paul's Walden. The general fall of the water level suggests that some measures will have to be taken in the near future in the parishes of Great Wymondley and Offley. The following steps

have been taken to prevent a shortage of water: A scheme for the sinking of a bore-hole at the existing well at Peters Green. Deepening of the existing well at Bendish. A pipe supply in the parish of Great Wymondley. Extension of mains to supply the hamlet of Tea Green.

Water has been carted in two districts. A scheme is also under consideration for the provision of a new water supply for parts of other districts in the area.

St. Albans.—No serious complaints of water shortage, but there has been considerable reduction in the water level in the areas dependent on wells. Various parts of district supplied by mains of Water Companies; the question of extending the mains to supply other villages is at present being considered.

Ware.—No acute shortage of water in district at present time, but there is a fall in the water level in the deep wells. Three parishes have a piped supply; in remaining parishes supply from wells of varying depth. In Stanstead Abbots water can be easily obtained from the Metropolitan Water Board.

Watford.—Whole area supplied with water from two water companies with the exception of two areas supplied by Hemel Hempstead and Watford Boroughs and a small area which depends on local supplies. No shortage in this area is anticipated.

Welwyn.—Generally well supplied except for the parish of Ayot St. Peter, where there is a serious shortage; steps are being taken to relieve shortage as far as possible; expert advice is being obtained as to the best means of obtaining an adequate supply for this parish.

DISPOSAL OF HOUSE-REFUSE: DUMPS.

Increased attention is being paid by Local Authorities to the removal and disposal of house refuse. Controlled tipping is now more extensively employed; this makes the dump less unsightly and minimizes the nuisance from rats and flies. There is still room, however, for improvement in dealing with the removal and disposal of house refuse. The rapid and progressive increase in the population in the southern parts of the County emphasizes the need for some more satisfactory system and consideration will have to be given in due course to the possibility of local authorities combining to provide some more up-to-date method of dealing with this question, which can only be satisfactorily solved by the provision of refuse destructors.

The precautions suggested by the Ministry of Health are as follows:—(1) the deposit to be made in layers; (2) no layer to exceed 6 ft. in depth; (3) each layer to be covered on all surfaces exposed to the air with at least 9 inches of earth, or other suitable substance, except a portion which may be allowed uncovered during the formation of the layer; (4) no layer to be left uncovered for more than 72 hours from the

time of deposit; (5) sufficient screens or other suitable apparatus to be provided where necessary to prevent any paper or other debris from being blown by the wind away from the place of deposit.

TRADE PREMISES UNDER SUPERVISION.

Dairies, Cowsheds, and Milkshops.

Milk Supply.—In pursuance of the Milk and Dairies (Amendment) Act, 1922, the Minister of Health has made an Order, the Milk (Special Designation) Order, 1922, prescribing the conditions subject to which licences may be granted. The authorities responsible for the issuing of licences under the above Order are as follows:—(1) The Minister of Health, licences to producers of Certified and Grade A (tuberculin-tested) milk. Producers holding above licences from the Minister of Health will also be entitled to sell milk produced under such licence as Grade A milk without further licence from Local Authority; (2) County Councils and County Borough Councils, licences issued to producers of Grade A milk; (3) Sanitary Authorities, licences issued to distributors of Certified milk, Grade A milk, including Grade A tuberculin-tested and Grade A Pasteurized milk, and of "Pasteurized" milk. No licence from a Sanitary Authority is necessary in the case of a licensed producer who distributes milk directly to the consumers.

During the year 69 samples of Grade A milk were examined, and of this number 58 were up to standard and 11 were below standard. The corresponding numbers last year were 89, 79, and 10.

The following figures indicate the action which has been taken during the year under the Milk and Dairies (Consolidation) Act, 1915:—Number of animals examined, 30,758; number found to be suffering from tuberculosis, 42; number of samples examined, 256.

Sale of Foods and Drugs Acts.—The work under the Sale of Food and Drugs Acts is carried out by the three Inspectors appointed for the purpose, working under the Chief Constable. Analysis of samples taken are made by the County Analyst, Dr. Bernard Dyer, of the Analytical Laboratory, 17 Great Tower Street, London, E.C., to whom I am indebted for the following report regarding the analytical work carried out during the year.

DR. DYER'S REPORT.

Food and Drugs Adulteration Act, 1928.

SUMMARY OF SAMPLES ANALYSED FROM 1ST JANUARY TO 31ST JANUARY, 1933.

	<i>Samples Analysed.</i>	<i>Samples Unsatisfactory.</i>
Milk	295	21
Milk, skimmed	1	—
Cream	6	—
Butter	15	—
Margarine	1	—
Lard	4	—
Brawn	1	—
Fish Paste	1	—
Meat	1	—
Sausages	3	—
Veal and Ham Pie	1	—
Glacé Cherries	1	—
Mincemeat	1	—
Jam	2	—
Raisins	1	—
Almonds, ground	2	—
Arrowroot	1	—
Self-raising Flour	2	—
Rice	1	—
Cinnamon	1	—
Pepper	1	—
Sauce	1	—
Coffee	2	—
Coffee and Chicory	1	—
Lemon Fruit Drink, Lemon Squash, Lime Juice, and Lime Juice Cordial	10	—
Gingerade	1	—
Ginger Wine	1	—
Raisin Wine	1	—
Peppermint Essence	1	—
Apples	4	—
Whisky	4	1
	368	22
" Appeal to Cow " samples.	4	—
	372	

It will be seen that 22 samples were unsatisfactory. One of these was a sample of whisky which had a strength 10 degrees below the minimum legal strength allowed ; while the other 21 samples were samples of milk. Of these six showed evidence of added water in proportions varying from 3 per cent to 36 per cent. ; while fifteen showed deficiencies in fat varying from 6 per cent to 20 per cent of the minimum quantity of fat proper to normal milk as indicated in the regulations.

SUMMARY AND CONCLUSIONS.

During the year special attention has been directed to certain Public Health services in the County. Consideration has been given to the condition of water supplies in the Rural Districts and a complete survey of existing supplies, and of the necessity and possibility of improvement and extension is being undertaken.

The scheme drawn up by the County Council for the adequate provision in the County of hospital accommodation for infectious disease has now been completed and has been submitted to the Ministry of Health. Its main provisions are :— the establishment of six hospital districts ; the pooling of beds and a suggested maximum number of beds ultimately to be provided in each hospital.

Under the Housing Act, 1930, particulars regarding the present position of housing in the various districts in the County has been under consideration. Considerable attention has been given by the Local Authorities to the question of housing during the year and by some of them to a considerable extent. There has been definite advance in securing slum clearance and it is satisfactory to note that special attention has been given in many districts to the reconditioning of existing houses. Schemes are also in preparation for the housing of the population displaced by the demolition of insanitary houses and slum clearance.

During the year the colony for mental defectives at Cell Barnes was opened. This institution provides accommodation for 600 defectives with facilities for training in various forms of employment. It is an important development in the County Council scheme for dealing with the problem of mental deficiency.

The health of the County during 1933 has on the whole been satisfactory ; in some respects, however, the statistics are less satisfactory than last year.

The estimated population of the County is given as 421,200, compared with 413,400 for 1932, representing an increase of 7,800.

There is no change in the birth-rate, which was 13·6. The actual number of births was 5,735 compared with 5,658 in the previous year.

There is a slight increase in the death-rate, which was 10·8 compared with 10·6 in 1932 ; the causes of this increase are discussed in the body of the report.

There is a decrease in the infant mortality, which was 42 compared with 50 last year. This decrease is due to a decreased number of deaths from congenital debility and

TABLE 27—CHIEF STATISTICS OF URBAN AND RURAL DISTRICTS, 1933.

As compared with those for 1932 and with the averages for ten years 1901-1910, 1911-1920 and 1921-1930.

DISTRICTS.		POPULATION.				Acreage (land and inland water), 1931.	Number of Rooms occupied, 1921.	Rooms per Person, 1921.	BIRTH-RATE. §					CRUDE DEATH-RATE. §					INFANT MORTALITY.					EPIDEMIC MORTALITY. §		DEATH-RATE FROM PETHISIS. §					DEATH-RATE FROM CANCER. §					District.
		By estimate, 1933.	By Census, 1931.	By Census, 1921.	By Census, 1911.				1933.	1932.	10 years. *	10 years. ‡	10 years. †	1933.	1931.	10 years. *	10 years. ‡	10 years. †	1933.	1932.	10 years. *	10 years. ‡	10 years. †	1933.	1932.	1933.	1932.	10 years. *	10 years. ‡	10 years. †	1933.	1932.	10 years. *	10 years. ‡	10 years. †	
Urban. SUMMARY		293,900	280,945	228,546	194,242	70,048	275,492	1'26	13'6	13'7	16'1	18'0	23'6	10'8	10'6	10'4	11'6	11'8	44	53	46	67	90	17	10	55	53	6	8	8	1'3	1'4	1'4	1'2	9	Urban.
1	Baldock	3,365	3,171	2,475	2,094	542	3,146	1'31	16'6	16'7	16'1	19'9	24'0	13'9	13'6	13'2	14'8	15'5	89	127	47	85	110	29	...	1'18	9	6	9	1'0	2'0	1'8	1'7	1'2	1'2	1
2	Barnet	16,020	14,721	11,740	10,440	3,114	13,946	1'27	12'2	12'2	15'1	16'5	23'3	10'1	10'5	10'9	11'1	11'0	56	37	49	67	100	...	06	43	2	5	5	8	1'3	1'6	1'5	1'4	7	2
3	Berkhampstead ...	8,452	8,053	7,250	7,302	1,208	9,576	1'40	13'1	13'1	15'0	16'0	16'5	9'9	10'5	11'2	12'6	10'1	18	72	50	62	93	11	...	23	2	7	6	7	8	1'7	1'4	1'1	5	3
4	Bishop's Stortford	10,160	9,509	8,840	8,721	3,371	10,528	1'35	13'5	12'3	13'9	16'8	21'6	10'6	11'9	11'6	12'7	12'6	36	82	50	76	91	...	20	59	4	6	6	8	1'7	1'6	1'5	1'3	1'1	4
5	Bushey	11,700	11,243	8,020	6,978	3,081	9,577	1'36	11'4	13'6	14'2	15'3	19'3	9'7	9'5	9'2	9'6	9'7	67	44	51	59	80	08	...	42	3	5	6	5	1'5	1'0	1'3	1'1	9	5
6	Cheshunt	15,180	14,651	13,640	12,954	8,479	15,077	1'12	14'6	14'6	17'5	20'8	26'6	11'0	10'9	9'8	11'6	11'6	54	78	45	71	91	06	06	26	1	6	8	6	9	1'0	1'1	1'0	8	6
7	Chorleywood ...	3,418	3,296	2,331	...	1,989	3,440	1'47	7'3	11'2	14'3	...	...	6'7	10'9	9'5	...	...	80	53	55	...	...	...	...	88	1'1	5	...	...	8	1'1	1'1	...	...	7
8	East Barnet Valley	20,360	18,542	13,490	13,381	2,644	17,390	1'32	14'1	14'9	16'2	16'8	22'3	8'4	9'4	9'6	9'8	10'2	49	47	49	48	85	18	05	49	4	4	6	6	1'3	1'5	1'3	1'1	7	8
9	Harpenden	9,113	8,349	6,670	6,172	1,633	8,846	1'43	10'7	11'4	11'5	14'6	19'1	12'7	9'8	9'3	10'2	10'1	41	30	37	51	81	0	11	33	2	4	6	7	2'4	1'	1'4	1'3	8	9
10	Hemel Hempstead	15,520	15,122	13,920	12,888	7,184	16,158	1'24	13'3	15'3	15'5	20'3	24'5	11'5	12'2	10'7	12'9	13'2	34	30	41	60	90	38	06	77	9	4	1'0	1'0	1'4	1'1	1'3	1'1	1'0	10
11	Hertford	12,320	11,376	10,750	10,383	1,503	12,212	1'24	14'2	13'9	15'6	19'1	22'9	10'6	10'3	11'6	13'8	14'1	51	24	47	78	104	16	16	56	6	6	9	9	9	1'3	1'4	1'7	1'2	11
12	Hitchin	15,030	14,382	13,352	11,905	3,675	16,664	1'29	14'0	13'7	16'3	19'7	23'4	12'5	11'6	11'8	13'2	13'1	86	75	61	67	102	19	...	39	5	5	7	7	1'3	1'6	1'4	1'3	8	12
13	Hoddesdon	7,716	6,811	5,400	5,196	1,576	6,716	1'27	15'5	16'6	17'0	18'3	23'5	9'9	11'2	12'2	13'1	12'1	25	57	50	70	97	25	13	...	2	3	1'0	9	1'1	1'6	1'5	1'6	1'0	13
14	Letchworth	14,480	14,454	10,210	...	3,651	11,433	1'15	11'5	11'0	17'3	...	...	9'9	8'1	8'1	...	...	30	62	45	...	...	20	13	41	4	5	...	...	1'3	1'0	1'0	...	...	14
15	Rickmansworth ...	11,130	10,810	7,520	6,288	4,727	9,058	1'24	16'7	13'1	18'3	18'4	26'7	11'1	10'4	10'9	10'0	11'4	64	76	44	65	88	08	...	36	6	5	7	9	1'3	1'3	9	9	6	15
16	Royston	3,803	3,831	3,780	3,985	1,003	5,008	1'42	7'8	9'3	13'3	15'6	21'1	17'6	14'3	12'8	13'0	12'2	...	...	48	74	76	...	...	1'31	5	4	1'0	8	5'2	2'6	1'9	1'4	1'5	16
17	St. Albans	30,160	28,625	25,620	18,133	2,698	32,008	1'29	12'9	13'0	14'4	17'6	21'2	11'7	11'0	10'8	11'6	11'8	23	39	55	65	78	29	10	72	9	6	7	9	1'0	1'6	1'4	1'2	1'1	17
18	Sawbridgeworth ...	2,799	2,604	2,285	2,304	2,678	2,953	1'30	17'5	12'8	16'5	17'0	24'1	13'5	10'7	10'5	13'5	12'2	20	59	56	76	91	1'0	37	35	...	2	6	8	2'1	1'1	1'1	7	1'4	18
19	Stevenage	5,552	5,476	5,023	4,856	4,545	6,486	1'31	12'2	13'8	16'4	19'1	26'3	11'8	13'8	10'7	11'6	12'1	15	65	49	63	77	18	35	...	3	2	6	8	1'4	1'4	1'2	1'1	1'2	19
20	Tring	4,465	4,364	4,278	4,481	4,407	5,784	1'36	13'8	14'8	16'6	18'9	21'0	13'8	10'5	13'1	13'2	13'1	65	15	33	54	85	...	...	90	2	6	7	5	1'3	6	1'8	1'4	1'1	20
21	Ware	6,501	6,171	5,950	5,842	629	6,550	1'14	15'3	14'8	18'6	19'6	28'0	13'0	13'0	11'8	13'3	14'4	60	74	44	69	107	...	46	31	5	6	7	1'1	2'6	1'8	1'2	1'1	9	21
22	Watford	57,370	56,799	46,002	40,939	3,251	52,936	1'18	14'1	14'1	16'8	18'0	26'2	10'9	10'5	9'7	10'7	10'1	64	55	50	73	88	19	15	77	5	7	9	8	1'4	1'3	1'2	1'0	7	22
23	Welwyn Gdn. City	9,286	8,585	...	...	2,460	...	...	18'3	19'1	...	...	...	5'9	6'3	...	...	...	24	47	...	...	...	...	...	64</										

premature birth, which was 153 compared with 164 for the previous year, and also to a decrease in the number of deaths from whooping-cough.

There is a slight increase in the maternal mortality, which was 3·4 compared with 3·1 for the previous year, the number of maternal deaths being 20 compared with 18 last year and 23 for 1931.

There is a slight increase in the death-rate from pulmonary tuberculosis, namely 0·53 compared with 0·51. The increase was in the urban districts, the death rate in the rural districts being unchanged. It must again be noted that the age-group with the highest number of deaths is the young female age-group 15/25.

It is satisfactory to be able to report a further decrease in the death-rate from cancer and other forms of malignant disease, which was 1·3 compared with 1·4 and 1·5 in 1931. The number of deaths from this cause was 578 compared with 601 last year.

The number of patients from the County attending the Venereal Disease Clinics in London during the year has increased, being 328 compared with 269 for 1932.

There is a slight rise in the death-rate from epidemic disease, which was 0·16 compared with 0·10 in 1932.

There was an increase in the number of deaths from influenza, scarlet fever, diphtheria, bronchitis, and pneumonia.

In conclusion, I desire once more to express my thanks on behalf of the County Council to the ladies who act as voluntary workers at both the County Council and the Voluntary Maternity and Child Welfare Centres for the valuable assistance they give and to the time they devote to this important work.

